

**MONITORING, VERIFICATION AND EVALUATION UNIT
AGRICULTURAL POLICY REFORM PROGRAM**

**MVE UNIT
APRP**

Sponsored by:

**Government of Egypt,
Ministry of Agriculture and Land Reclamation**

**United States Agency for International Development/Egypt
Office of Economic Growth, Competitiveness and Agricultural
Development Division**

**THE IMPACT OF
THE AGRICULTURAL
POLICY REFORM
PROGRAM (1996-
2002) IN EGYPT:
CONFERENCE
PROCEEDINGS**



Abt Associates Inc.

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Prime Contractor:
Abt Associates Inc.

Subcontractors:
**Environmental Quality International,
Management Systems International**

USAID Contract No. 263-0219-C-00-7003-00

July, 2002

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Impact Assessment
Report No. 30

**THE IMPACT OF THE AGRICULTURAL POLICY
REFORM PROGRAM (1996-2002)
IN EGYPT**

Conference Proceedings



The conference was inaugurated by His Excellency
Deputy Prime Minister
and
Minister of Agriculture and Land Reclamation,
Dr. Youssuf Wally

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ACKNOWLEDGMENTS

MVE is proud of the analyses it has completed and the presentations it has made on the impact of APRP, but none of these would have been possible without the guidance and support of many individuals, some of them at the highest positions in the Government of Egypt. Dr. Saad Nassar, former Program Director of APRP and President of the Agricultural Research Center of MALR, and currently Governor of Fayoum, always gave the Unit his support and guidance. Dr. Hussein Soliman, current Program Director of APRP, also gave the Unit helpful direction. Eng. Mahmoud Nour, former Program Coordinator of APRP, shared his boundless knowledge of Egyptian agriculture and his ideas about policy reform. The Unit was also fortunate to collaborate with Eng. Gamil Mahmoud, Chairman of the MWRI Steering Committee.

Dr Mohamed Omran, our project officer at USAID, always gave very strong technical, administrative and personal support to the Unit and its staff. Thanks are due also to his colleagues at USAID, Ms. Dawn Thomas, Dr. Glenn Rogers, Ms. Anne Williams, Dr. Wadie Fahim Mankarious, Dr. Thomas Olson, Dr. D. Craig Anderson, and Eng. Ali Kamel.

The MVE Unit was privileged to work in collaboration with other APRP units that shared their time and information in the pursuit of useful analytical results. These included Drs. Max Goldensohn and Jane Gleason, former and current Chiefs of Party and their staff in the RDI Unit; Jeff Fredericks and Andrew Tczap, former and current Chiefs of Party and their staff in the EPIQ water policy reform unit; and Dr. Akhter Ahmed and his staff in the former FSR Unit. Special mention is made of the cooperative collaboration between the MVE Unit and the staff of the GTZ-assisted Egyptian-German Cotton Sector Support Program, including Dr. Heinz Burgstaller (German Team Leader), Thomas Selzer, Helmut Schoen, and Mohamed Abu El Wafa.

During the course of our studies, individuals too numerous to name from the private and public sectors generously offered their time, provided detailed information, and answered numerous questions. Without the combined input of all of these key informants, these analyses would not have been possible.

The editors of this volume would like to thank the superlative MVE technical staff, Dr. Adel Mostafa, Dr. Morsy Ali Fawzy, Dr. Sherif Fayyad, and Ms. Samar Maziad, for their invaluable contributions to the output of the Unit, including the conference described in this publication and many other reports and presentations during the more than five years that the Unit was active. The Unit was assisted by many consultants, some expatriate but most Egyptian, who worked hard alongside the Unit staff to make our results the best they could be. Some of these consultants made presentations during the conference.

The presentations herein and the forthcoming reports on which they are based would never have been possible without the impressive skills and dedication of the MVE support staff, especially Mrs. Yvonne Louis Azer and Ms. Dalia Samir Radwan. Ms. Maggie Nabil also assisted with the presentations and report finalization. We also thank our former support staff Ms. Flora Naiem Kaddies, Mr. Hesham Salah Amin, and Ms. Ayat Khaled Azmy for their contributions.

We are grateful to our conference facilitators, Dr. Amr Moussa and Steve Joyce, for helping us to share ideas effectively. The conference organizers, Irene Sourial and Hoda Fariq of EQI, did an excellent job of insuring that the facilities (not to mention the food) for the conference were excellent and available when required. Simultaneous translators Abdel Rahim El- Mahdy and Hazem Abdel Latif helped us all to understand each other immediately.

In these assessments, as in all of the Unit's reports, the MVE Unit alone is responsible for any errors and omissions. The findings and recommendations of these presentations and reports are those of the MVE Unit alone and not of APRP as a whole and not of USAID.

PREFACE

Objectives of APRP

The objectives of the Agricultural Policy Reform Program (APRP) are to increase the incomes of Egyptians by:

- allowing the private sector to compete in input and output markets
- increasing Egypt's exports of suitable products
- establishing conditions favoring private investment, including the privatization of GOE-owned enterprises
- more efficient management of Egypt's Nile Water System and its land resources

From 1996-2002, five ministries worked under APRP: MALR, MWRI, MSHT, MFT, and MPE. This reflects the broad scope of policy reforms undertaken by the Government. APCP started agricultural policy reform by working mostly at the production level. APRP extended these efforts to the marketing system, exports, privatization, development of agricultural support services, irrigation management, food security, and related areas.

APRP implemented five annual tranches of policy reforms (benchmarks). In all there were 151 benchmarks and 242 indicators under APRP.

Tranche	Percent of Benchmarks Accomplished or Exceeded
I	83%
II	76%
III	71%
IV	70%
V	100%
Total	81%

Purpose of the MVE Unit

The MVE Unit carries out monitoring, verification, and evaluation under the Agricultural Policy Reform Program. It also conducts special studies.

Verification consists of the analysis of accomplishment by the Government of Egypt (GOE) of the policy reforms agreed to in annual Memorandums of Understanding by the GOE and USAID.

The *monitoring* program consists of periodic analysis based on a set of progress indicators agreed to by the different units of APRP. The attempt here is to measure the progress of the program sooner and more frequently than the impact assessment program. The indicators are relatively easy to calculate but do not reflect the final impacts of the program.

Impact assessment (evaluation) measures the effects of policy reforms under APRP on the agricultural sector. The Unit used subsector analysis (structure-conduct-performance method) to assess changes

in key commodity subsectors (cotton, rice, wheat, and fertilizer). Cross-cutting studies reported on other key impacts of APRP, e.g., in helping to change the roles of the public and private sectors.

Special studies may address any topic relevant to the agricultural policy reform program. The Unit completed special studies on 1) cotton quality and grading, 2) agricultural productivity, 3) the privatization of the cotton ginning industry (a significant success story), and 4) the relation between agricultural growth and the creation of employment via the development of small and micro enterprises in rural areas and small towns.

Conference Objectives and Implementation

The purpose of the conference described in this document was to present the results of the MVE Unit's impact assessments to a broad audience of APRP stakeholders and get their feedback.

The conference was held from June 1-4, 2002 in Cairo, Egypt. APRP was fortunate that the inauguration of the conference was graced by the presence of His Excellency the Deputy Prime Minister and Minister of Agriculture and Land Reclamation, Dr. Youssuf Wally. Other dignitaries included the Director of USAID/Egypt, Mr. Willard Pearson; Dr. Saad Nassar, Governor of Fayoum and former Program Director, APRP; Dr. Ahmed Guweili, Director General, Arab Economic Unity Council and former Minister of Trade and Supply; and Dr. John Mellor, Vice President, Abt Associates Inc. and former director, IFPRI. Each of these distinguished individuals made a short address during the inauguration.

The technical presentations, which lasted for three days, were organized as follows:

- Introduction to APRP
- Methods, Information and Initial Effects
- Impact Assessment: Commodity Subsectors
- Impact Assessment: Cross-Cutting Studies

Presentations were made one at a time. There was simultaneous translation from English to Arabic and Arabic to English during both the presentations and the discussions that followed them. About 170 professionals attended the conference, not including about 25 members of the MVE Unit staff and other presenters. Dr. Amr Moussa and Steve Joyce were the facilitators for the conference.

Purpose of This Document

The purpose of this proceedings volume is to capture some of the essential material of the conference. The full reports on which some of the presentations were based are being published by the MVE Unit, and summaries of some of these reports will also be printed in both English and Arabic.

The remainder of this volume contains the agenda of the conference; the full text of some of the inaugural speeches; the presentations; a summary of the discussions; and a list of the attendees.

CONFERENCE AGENDA

The Impact of the Agricultural Policy Reform Program (1996-2002) in Egypt

MVE Unit - APRP

Impact Assessment Conference

June 1-4, 2002

Inauguration Day

Saturday, June 1
Agricultural Foreign Relations, MALR

9:00 AM

His Excellency Dr. Youssuf Wally,
Deputy Prime Minister and Minister of Agriculture and Land Reclamation

Mr. Willard Pearson,
USAID Mission Director

Dr. Saad Nassar,
Governor of Fayoum and former Director, APRP

Dr. Ahmed Guweili,
Director General, Arab Economic Unity Council

Dr. John Mellor,
Vice President, Abt Associates Inc. and former director, IFPRI

Day 1

Sunday, June 2
Royal Meridien Hotel, Garden City, Cairo

9:00 - 9:30 Registration

9:30 - 9:40 Conference Goals - Dr. Gary Ender

Introduction to APRP

9:40 - 10:00 Goals and Objectives of APRP
Dr. Hussein Soliman, Program Director, APRP

10:00 - 10:30 History of APCP and APRP - Dr. Mohamed Omran

10:30 - 11:00 Main Thrusts of APRP - Dr. Adel Mostafa

11:00 - 11:30 Discussion

11:30 - 11:50 Break

Methods, Information and Initial Effects

11:50 - 12:10 Impact Assessment Methods for APRP - Dr. Gary Ender

12:10 - 12:30 Assessing the Impact of Policy Reform on Commodity Subsectors
Dr. John Holtzman

12:30 - 1:00 Discussion

1:00 - 2:30 Lunch break

2:30 - 3:00 Socioeconomic Trends in Rural Areas, 1992-2000
Dr. Glenn Rogers

3:00 - 3:30 Discussion

3:30 - 4:00 Impact of Water Policy - Mr. Andrew Tczap

4:00 - 4:30 Discussion

4:30 Close: Tea/Coffee available

Day 2

June 3

Royal Meridien Hotel, Garden City, Cairo

Impact Assessment: Commodity Subsectors

8:30 - 9:00	Late registration for participants
9:00 - 9:40	Cotton - Dr. John Holtzman and Dr. Adel Mostafa
9:40 - 10:20	Discussion
10:20 - 11:00	Wheat - Roger Poulin and Dr. Abla Abdel Latif
11:00 - 11:30	Discussion
11:30 - 11:50	Break
11:50 - 12:30	Rice - Dr. John Holtzman and Dr. Abdel Rahim Ismail
12:30 - 1:00	Discussion
1:00 - 2:30	Lunch break
2:30 - 3:00	Fertilizer - Dr. Abdel Hamid Youssef Saad
3:00 - 3:30	Discussion
3:30 - 4:00	Horticulture - John Lamb
4:00 - 4:30	Discussion
4:30	Close: Tea/Coffee available

Day 3

June 4

Royal Meridien Hotel, Garden City, Cairo

Impact Assessment: Cross-Cutting Studies

8:30 - 9:00	Late registration for participants
9:00 - 9:30	Changes in Roles of Public and Private Sectors - Dr. Derick Brinkerhoff Topics covered include: cotton pest management, trade associations, horticultural export support services, cooperatives, public-sector capacity (information), private-sector participation in policy dialogue
9:30 - 10:00	Discussion
10:00 - 10:30	Impact of APRP on the Agricultural Information System Dr. Rollo Ehrich and Dr. Morsy Ali Fawzy
10:30 - 11:00	Discussion
11:00 - 11:40	Farm-Level Impact of APRP Dr. Morsy Ali Fawzy, Dr. Mamadou Sidibe, and Dr. Osman Salama
11:40 - 12:20	Discussion
12:20 - 1:50	Lunch break
1:50 - 2:20	SMEs and Rural Employment Creation - Tamer El Meehy and Dr. Lamia Bulbul
2:20 - 2:50	Impact of Agricultural Growth on SMEs and Employment Creation Dr. John Mellor
2:50 - 3:30	Discussion
3:30 - 3:50	Impact Assessment: Summary - Dr. Gary Ender and Dr. Mohamed Omran
3:50 - 4:30	General Discussion
4:30	Close: Tea/Coffee available

INAUGURAL ADDRESSES

REMARKS BY USAID/EGYPT DIRECTOR WILLARD PEARSON

Your Excellency Deputy Prime Minister Wally; Excellencies; distinguished guests; ladies and gentlemen. It is a pleasure for me to address this group today as we assess the impact of six years of agricultural policy reform in Egypt. USAID is proud to join the Ministry of Agriculture and Land reclamation in sponsoring this distinguished conference.

I want to thank the APRP/MVE Unit that worked so hard to organize this conference. They were joined by the efforts of many at the Ministry of Agriculture and land reclamation (MALR), Ministry of Water Resources and Irrigation (MWRI), Ministry of Foreign Trade (MOFT), Ministry of Public Enterprise (MPE) and Ministry of Supply and Home Trade (MSHT). Mabrouk and Shokran to all of you!

The Egyptian Government's Agricultural Policy Reform Program has advanced reform in many ways:

- Key GOE technical offices and USAID contractors have been neutral brokers between the government and the private sector, and between government ministries;
- The Program focused on implementation at a central and governorate level with both public and private partners;
- APRP built on early successes and continually showed stakeholders that change was possible and that it is important to celebrate past successes, and
- Finally, APRP successfully leveraged the government's resources with resources of several donors, as exemplified by the collaboration with GTZ's Cotton Sector Promotion Program and our USAID project.

I am happy to say that USAID stands ready for continued involvement in agricultural policy reform. As you know, our assistance levels are declining and future projects will be smaller and more focused on support for private sector initiatives. This is in line with the Egyptian and US government's agreement several years ago to transition our economic relationship from one based on aid to one based on trade. WE will need to work with you to make the best use of our smaller program resources. We stand ready to help with a next generation of agricultural policy reform that improve Egypt's agricultural trade and rural well being.

I would like especially to recognize the leadership of Deputy Prime Minister Wally in making agriculture the first sector to undergo significant policy reforms in the 1980s and early 1990s. This demonstrated that courageous reforms can have a positive impact on peoples' lives. This is now being followed up with an increased focus on the actual implementation of agricultural reforms, a step which merits more attention in other reform areas outside of agriculture. Here is the challenge for you over the next several days. Take stock of the lessons of these efforts in order to build a future where agriculture and agribusiness will continue to be a major source of income, jobs, and business opportunity.

Recently available data from various sources provides very strong evidence that the agricultural policy reforms and liberalization of the agricultural sector have changed people's lives for the better. In areas where these reforms have been implemented, they have opened up new opportunities for rural people

and contributed to a marked improvement in social indicators - healthcare, educational attainment, child health. But in areas where reforms have been limited, rural people's lives are not improving as rapidly as they could be. This is both a very strong statement of how much you have accomplished, and a statement of how much more needs to be done. We stand ready to help you.

My concerns fit the theme of this conference: the importance of Agricultural Policy Reform as demonstrated by its impact. The theme also fits nicely into USAID's strategic goal of helping Egypt advance from an aid recipient to a trading partner. It is my hope that we can regain the momentum of overall reform that has brought a better life for millions of rural Egyptians.

Last week, I had the privilege of sharing the podium with the Prime Minister at the Conference on Institutional and Policy Challenges facing the Egyptian Economy. At that time, I asked the attendees to consider a second generation of economic reform including initiatives in five policy areas:

- trade and customs
- competition
- education
- the public/private partnership framework
- financial sector performance

Today I would like to emphasize how closely related these key areas of reform are to the agricultural sector. Implementing reform in all of these areas is crucial to more rapid agricultural growth and the continued successes of many of the changes made under the APRP.

Agricultural Trade

Exports of agricultural products, both fresh and processed, are critically important to the future of Egyptian economic growth. There is compelling evidence that expanding trade improves living standards in those countries engaged in cross-border commerce. Benefits include lower prices and a wider range of goods and services for consumers, and enhanced competitiveness for domestic industry. To capture those benefits, the Government of Egypt has liberalized trade in important ways. We applaud those efforts.

Agriculture is increasingly a focus of international trade negotiations. Egypt is party to several important trade agreements including the WTO, the Egypt-EU partnership, COMESA, and the Arab Free Trade Agreement. These present major opportunities for increasing market access, profiting from Egyptian intellectual property, and benefitting from bio-technology. Egyptian agricultural experts must be fully engaged implementing these new institutional arrangements in a way that works to the advantage of Egypt.

One task of this conference is examining how Egypt achieved its past successes. A decade ago a major adjustment in the exchange rate accelerated agricultural growth and exports. Recent devaluations of about 26% are again making Egyptian agricultural exports more competitive on world markets. But high tariffs and technical barriers continue to limit trade. In addition, customs procedures are reducing the competitiveness of Egypt's agricultural exports. Part of the problem is that man people (but I know

not those of you in this audience) tend to think that customs procedures affect only imports. Quickly implementing the Government's commitment to lower tariffs, remove barriers, and change customs delays from weeks to hours, would have a salutary effect on agricultural sector growth, rural incomes, and job creation.

I am proud to report that USAID and the Government of Egypt recently launched a program to promote trade reform. We are currently exploring an agreement to help modernize the Customs Service.

Enhancing Competition

Government must work with agriculture-based industry to minimize the difficulties of adjusting to increased competition when liberalization occurs. Globalization of the world economy is an established fact. Removal of trade barriers, increased foreign investment, and enhanced competition should be accepted with purpose, care and with ample safeguards, but accepted just the same.

Mexico and Egypt are half a world apart, but they share common problems and challenges. In both nations, the food industry is based on family-owned small operations. Import protection led to inefficient companies supplying customers with outdated, unattractive products. The business environment limited firm competitiveness and there were few supporting firms for exporters wishing to sub-contract. With shallow economic linkages, firms were less able to compete with foreign producers.

In Mexico the processed food industry has now undergone a dramatic and successful, though painful, adjustment to international trade. Here's the result: between 1990 and 2000, foreign direct investment in Mexico increased from \$2.6 to \$13 billion, a 400% growth, and exports increased from \$41 to \$167 billion, 311% growth. Egypt's food industry has only a few years to 'get ready for WTO', and time gets shorter each day. USAID is here to help with this transition.

In fostering competition, let us not lose sight of privatization's importance. The Government has reduced its role in producing and distributing goods. Because of its past successes, the privatization program is held to high standards and expectations, but today investors are concerned about the slowing pace. Privatization in the sugar and cotton sub-sectors needs continued serious attention. Renewed emphasis on privatization would be a clear signal to domestic investors who stand ready to invest in the agricultural sector.

Human Resources and Information

Farmers are now free to choose what to grow, how to grow it and where to sell it. Market forces have taken hold and new agribusinesses are emerging everyday. As the sector grows, specializes, and becomes more export-oriented, stakeholders realize they need information that MALR extension and research institutions should provide. Much of this - market data, economic analysis, relevant technology - has not been readily available in the past from public or private sector providers. This has limited the participation of small holders in the growth of the agricultural sector. Richer farmers can pay for these services privately, and many already do so. Harnessing the private sector to provide information and training to smaller producers is a challenge for the next decade.

APRP has assisted the MALR to collect and disseminate farm-level agricultural and economic statistics. Improved crop yield forecasting for wheat and cotton are allowing more timely decision making. The program has helped the Ministry of Water Resources and Irrigation (MWRI) to better match irrigation water needs and supply at the local level. The need for information and support for transport decision making will continue to grow rapidly. Facilitating use of information by the private sector needs to continue as a high priority for the government.

Egypt has 14 public universities and 18 agriculture faculties with well-trained professional staffs. I hear from the private sector that these schools are not producing the applied skills for business, technology development, and farm management that Egypt's exporters, agribusinesses, and research institutions need. Better use of this national treasure of educational infrastructure in the future is an area which needs urgent attention.

Public-Private Partnerships

APRP's work with trade associations and agricultural commodity councils has helped the private sector mobilize support for agricultural and economic reforms. Effective business and trade associations will play a pivotal role in the future development of Egyptian agriculture.

In a liberalized economy, public and private sectors work jointly to promote economic growth with a shared interest in increased exports, employment, and incomes. This partnership depends upon mechanisms that represent and give voice to private sector interest. There need to be mechanisms that bring together government policymakers and private actors for discussion and dialogue. Before liberalization, Egypt had few such mechanisms.

APRP has contributed to an understanding of the emerging roles of the public and private sectors in three ways:

First, government policy reform can serve as an important impetus for initiating change. The Government has implemented reforms gradually and this led to short-run successes. However, some interpret the slow pace as ambivalence and weak commitment. For long-term benefits, reformers need to "stay the course" and fully implement policies that initiated change.

Second, public and private sectors should work together to take advantage of each one's distinctive competencies and capacities. The demand side of policy reform is important. Government commitment and ability to supply reform is enhanced by pressure to implement reform from the private sector and civil society.

Finally, the past few years have shown that the private sector is capable of responding to and expanding on many of the GOE pilot efforts. In agricultural input distribution, processing, and marketing, the private sector has grown rapidly in many areas to fill Egypt's needs. The many successful pilot activities that have been explored under APRP need follow up support and broad implementation.

Closing

The experience of other countries suggests that there is a real reward to implementing policy reforms. This reward takes the form of growth, social and economic stability as well as an enhanced ability to cope with shocks. Policy reforms can and must be undertaken - and the sooner, the better. I can foresee Egypt recapturing the momentum of the early 1990s and then attaining growth of 8 to 9 percent, placing Egypt among the leading emerging market economies. This is the foundation for creation of the jobs that young Egyptians need. Egypt - the largest nation in the Middle East and the center of Arab learning and scholars - can inspire other countries in the region on the way forward.

Your review of the impact of APRP can pinpoint how success can follow implementation of reform. I encourage you to identify the benefits of trade reform for the agricultural sector, the rewards of competition in agro-industry, the gains from the widespread use of information and skilled management, and finally, the opportunities to build on the success of the many public-private partnerships you have initiated.

I applaud your efforts to take on these difficult, but rewarding tasks. I wish you every success in your efforts here today and tomorrow. Thank you.

ACHIEVING A HIGH GROWTH RATE IN AGRICULTURE AND ITS EMPLOYMENT IMPACT

REMARKS BY DR. JOHN W. MELLOR
Abt Associates Inc.

Your Excellency, Deputy Prime Minister and Minister of Agriculture, Dr. Wally, it is a great privilege to be on the platform with you who have done so much over the years to set the stage for agriculture playing its key role in raising incomes of the mass of rural people. It is a further privilege to be speaking with such a distinguished group of your colleagues, who have worked with you in this important task. And, I am proud to stand with my countryman, Mr. Pearson, who has seen that USAID has played a continuous, steady role in assisting in these complex tasks.

In my brief remarks, I will describe key relationships in achieving rapid employment growth and poverty reduction, as well as rapid growth in agriculture.

I can now be very clear: the employment problem in Egypt cannot be solved without rapid agricultural growth. International data and Egyptian data and models both support this conclusion. In Egypt, balanced growth that includes rapid agricultural growth will double the incomes of the laboring class of people in five to ten years. In contrast, rapid growth of the urban export sector, but without agricultural growth, will have no impact on the employment problem, even though the GDP growth rate is only reduced by 15 percent. If, on the other hand, agriculture grows rapidly but growth of the urban export sector is sharply slowed, the overall growth rate will be sharply reduced, but the employment growth rate will not decline much. Thus, the urban export-oriented sector is the major force in GDP growth; agriculture is the major force in employment growth. Balanced growth includes both; but the requirements of the two sectors differ.

Why is agriculture so dominant in employment growth? CAPMAS data tell us that 42 percent of the total labor force works in the rural non-farm sector. They produce highly labor-intensive goods and services that are consumed in the rural areas and that are not suitable for export. Local demand must increase if these people are to have increased employment and incomes; that demand comes from rising farm incomes. If farm incomes rise, demand grows quickly and so does employment and income. It is of course small farmers who are spending their added income in the rural areas, and making massive numbers of jobs in the highly labor-intensive, rural non-farm sector..

What does it take to get rapid agricultural growth? There are two basic sets of forces: technology and policy.

Technology is critical in agriculture because of the land constraint. With limited land, yields must be increased if incomes are to increase. Because of basic science breakthroughs, agricultural science moves very rapidly, and it is global. Scientists in all countries must continually share in what is being discovered in other countries.

In my modeling work on Egypt, I get much faster growth rates from a given amount of technological change and capital increase than actually happens. The reason for that is the economic models assume

perfect knowledge and completely freely moving resources. Policy, including the many changes underway in Egypt, is concerned with improving knowledge and helping resources move freely. Some good policies provide new and improved government services, others repeal bad previous policies. Both are important.

Policy and technology interact. In agriculture, good policy does not provide much impact if the improvements in technology are not increasing the potential to reduce costs and increase competitiveness. Improved technology does little good if knowledge is not available, not just of the technology, but of input and output markets as well, and if resources, including capital and credit, do not flow freely.

Rice and cotton exemplify this interaction. A few key policy reforms related to rice coincided with a major technological advance, and so rice production grew very rapidly. In the case of cotton, the improvements in technology have not been so striking, and critical gaps in policy improvement still exist. Cotton production has declined – to a significant extent in favor of rice.

Rapid-growth countries achieve 4- to 6-percent agricultural growth rates. Egypt has a resource base that is highly responsive to modern science and to well-working markets. Thus, the 4.1-percent growth rate targeted is quite conservative. However, to do better than that will require rapid growth in all the major commodity groups, each of which has somewhat different technology and policy requirements. Thus, priorities will have to be set within the commodity groups.

Finally both technology and policy development are dynamic. Scientists have to continually run to keep up with global advances. That requires dynamic financial, institutional, and technical assistance support. Policy requires constant analysis of alternatives in order to keep up with the constantly changing global environment within which policy works. The various studies carried out in connection with APRP and MVE have been very helpful in keeping policy recommendations up to date. In the future, attention must be given to capacity-building within Egypt and to setting priorities for action so that analyses can be sharply focused.

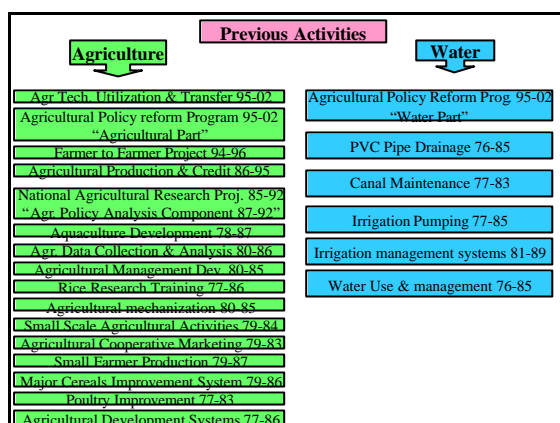
It has been a privilege for me to participate in these processes from which I have learned so much. I hope I am able to make some small intellectual contribution in return. Thank you for this opportunity.

PRESENTATIONS

first picture page

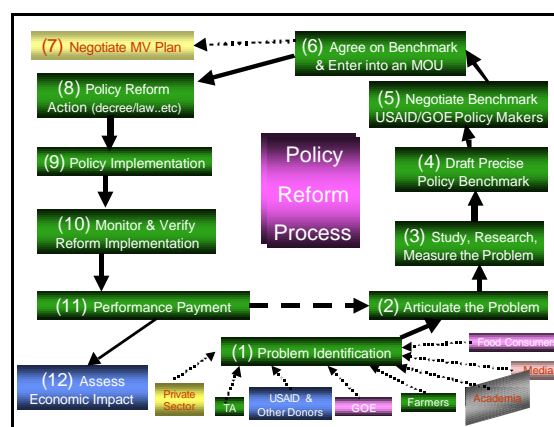
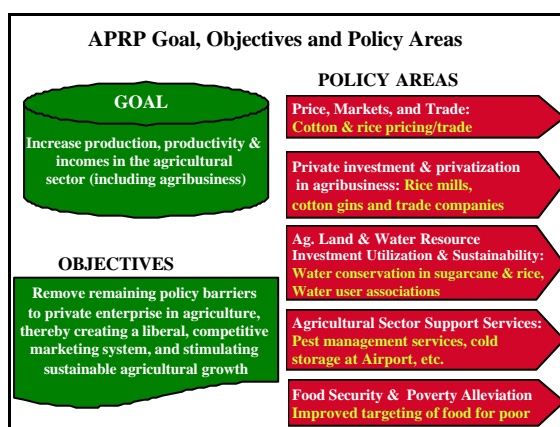
APRP GOALS AND OBJECTIVES

DR. HUSSEIN SOLIMAN



USAID contribution to agricultural development: \$1.3 billion (25 years)

	1981	2002
Cereals production	8 million Tons	20 million Tons
Vegetable production	11 million Tons	23 million Tons
Sugarcane productivity	34 Ton/Fedd	50-60 Ton/Fedd
Rice productivity	2.4 Ton/Fedd	3.8 Ton/Fedd
Agricultural Investments	LE 9 billion	LE 131 billion
Agricultural growth rate	2.8%	3.4%
Agricultural Land	6.2 million fedd.	8.2 million fedd.



APRP Allocation & Disbursement

\$ Million

Tranche	I	II	III	IV	V	Total
Allocation (\$M)	50	65	65	65	CO	245
Disbursement (\$M)	44	57	53	46	44	244
Performance (%)	88%	88%	82%	71%	98%	99.6%
Carry Over (CO) \$M	6	8	12	19		45

Technical Assistance \$56 million

Areas of Success: Examples

- Cotton marketing and processing
- Matching water supply and demand
- Agricultural information systems
- Cotton best management
- Agricultural associations
- Restocking the Nile with fish
- Water conservation (sugarcane and rice)

APRP Grant Disbursement for MALR (1996-2002)

Total amount of the grant utilized by MALR was LE 295 million in the following areas

- Farmer Services: Marketing Information – Wadi El-Saida – Food Pattern Study – Ag. Commodities Stabilization Fund – Cottonseed Subsidy – Cotton Pest Control – Weed Control
- Research: Improving Productivity of Potato, Linen & Sisal
- Extension: Red Weevil Control – field Water and Soil Management - Recycling of agriculture Waste – Fruit Fly Control – Introduction of new Varieties of Fruit Plants
- Genetic Resources: Gene Bank – Genetic Engineering lab – Conservation of Genetic Resources.

- Training: Training New Graduates and Beneficiaries on using Modern Technologies in Reclaiming and Cultivating New Lands (Cairo University, Desert Research Institute, American university)
- Development of Rural Women: Training of Rural Women in New Lands on Activities of Rural Development and Food Processing – Motherhood and Childhood upgrading in Rural Areas
- Environment: Reuse of Drainage Water in afforestation
- Increase productivity of Ag Crops: Improving Sugarcane Irrigation – Short-Duration rice - Integrated Agr. Development in Upper-Egypt

- Livestock & Fish Improvement: Support Livestock Production in the New Land through the central fund and Expanding the Buffalo fattening project
- Agricultural Information system: Development of Ag Statistics – Cotton and Wheat Forecast – Cost of Production and Farm Income Estimates – Agricultural Census
- Egypt's Contribution to International Development Organizations: CGIAR

How to Apply for a Project

- Project document based on:
 - ▶ Problem identification
 - ▶ Goal(s)
 - ▶ Where we are now? (benchmarks)
 - ▶ Where we want to be? by when?
 - ▶ Constraints
 - ▶ How to overcome constraints? (activities)
 - ▶ Impact assessment
 - ▶ Tools to measure impact
 - ▶ Verification of impact assessment
 - ▶ Budget & budget breakdown
 - ▶ Monthly reports

HISTORY OF AGRICULTURAL POLICY REFORM IN EGYPT, 1982-2002

DR. MOHAMED A. SHERIF OMRAN

In the early 1980s, Egypt started a serious agricultural reform program. The implementation of agricultural policy reform program was designed to prepare the agricultural sector for the transition of the Egyptian economy to a free-market system. The Ministry of Agriculture and Land Reclamation (MALR), with the support of USAID, designed two agricultural policy reform programs; the first started in 1987, and the second continued until 2002.

The first policy reform program was under the USAID-funded Agricultural Production and Credit Project (APCP), which was implemented from 1987-1995. The policy reform component of APCP focused mainly on the agricultural sector, with limited policy reforms in related areas, such as fertilizer.

By the end of APCP, there was a need for a broader policy reform program to deal with the entire agribusiness system, which includes the agricultural sector and parts of other sectors. The second policy reform program was designed to work with several ministries in order to achieve a liberalized agribusiness system in Egypt. This was the Agricultural Policy Reform Program (APRP), which started in 1996 and continued until 2002.

Thus the policy reform process can be described in several phases. They are the pre-reform era (1982-1986), the first phase of reform (1987-1989), the second phase of reform (1990-1995), the third phase of reform (1996-1999), and the fourth phase of reform (2000-2002). Indeed, reform is a continuous and dynamic process, which should continue after the end of USAID projects.

Pre-Reform Era (1982-1986)

In the early 1980s, MALR started studying the impact of reducing credit and price subsidies on agricultural production and consumer prices. Reducing credit and price subsidies was part of the national policy for moving toward a liberalized economy. These studies were key first steps in MALR's preparation for leading the way in economic liberalization. These studies showed that efficiency would increase after the decontrol of agricultural inputs and outputs in Egypt. As a result of these studies, the Government started step-by-step reductions of the subsidies on some agricultural inputs, such as animal feed.

First Phase of Agricultural Policy Reform (1987-1989)

In the mid 1980s, the Government of Egypt began to promote the long-term goals of reform in the agricultural sector and strengthen market-based incentives. In the late 1980s, the privatization concept was introduced to reduce inefficiency in public sector management. The Government preferred to have a transition period between the public sector and the private sector eras; this was begun by issuing a new law to reorganize the public sector into what are called "holding companies." Agricultural markets and cropping patterns were liberalized, except for those of cotton, rice, and sugarcane. During this period, the Government retained its control over cotton and sugarcane production and marketing, but rice was partially liberalized by reducing the size of the compulsory delivery quota and by allowing rice producers to sell more of their output to private dealers.

Second Phase of Agricultural Policy Reform (1990-1995)

In the early 1990s, the Government of Egypt used privatization and liberalization as tools of resource reallocation to achieve the goal of economic efficiency. In the agricultural sector, rice production and marketing were liberalized. PBDAC's role in agricultural input distribution and output procurement was reduced. The private sector started its involvement in agricultural input distribution with an eye towards full liberalization. It was very important to have a transition period while moving to the free market system to avoid any harmful effects that might result from sudden liberalization. This was the preparation for competition among the private sector, cooperatives, and public sector agricultural companies in the agricultural input and output markets. By 1994, PBDAC was almost out of agricultural input distribution. The cotton market was partially liberalized by permitting private sector traders to buy seed cotton from farmers, gin it, and sell lint cotton to textile holding companies. However, private sector firms could not export cotton.

Third Phase of Agricultural Policy Reform (1996-1999)

In the late 1990s, the Government of Egypt continued its policy reform program with USAID support. The policy reform program covered five policy areas, they are: 1) price, markets, and trade; 2) private investment and privatization in agribusiness; 3) agricultural land and water resource investment utilization and sustainability; 4) agricultural sector support services; and 5) food security & poverty alleviation.

One of the main accomplishments of the reforms under this phase was to better match water supply and demand. After giving farmers the right to choose their cropping pattern, the Government could no longer estimate water demand based on its plan for crop production. Thus MALR implemented a scientific and practical method (farmers' planting intentions survey) to estimate water demand. Then the Ministry of Water Resources and Irrigation (MWRI) used this information to calculate and release the appropriate amount of irrigation water. The GOE introduced an Egyptian cotton logo. MALR issued a decree prohibiting the use of child labor in agriculture, especially in cotton fields, and implemented a comprehensive child labor public awareness campaign. It improved the agricultural information system through more scientific data collection methods. Technical assistance and training programs were provided to support the improvements in the agricultural information system.

Fourth Phase the Agricultural Policy Reform (2000-2002)

In the early 2000s, the Government of Egypt continued its policy reform program, focusing on three policy areas: 1) agricultural land and water resource investment utilization and sustainability; 2) agricultural sector support services; and 3) food security and poverty alleviation. In this phase the program helped in improving policies for water management. The program also facilitated public participation in decision-making regarding planning, development, and management of Egypt's water resources. In addition a policy was developed to encourage the commercial production of crops irrigated with wastewater, especially trees. Cotton testing by the Cotton Arbitration and Testing General Organization was improved, and the fiber quality information was disseminated better. MALR also used improved fisheries to enhance employment, incomes and nutrition by restocking the Nile in Upper Egypt.

MAIN THRUSTS OF APRP

DR. ADEL MOSTAFA

Overview

- Background
- Main Thrusts of APRP
- Some Successful Benchmarks
- Benefits and Lessons Learned

Objectives

- Provide background, context for impact assessments
- Describe what reforms were attempted under APRP: its main thrusts

APRP Participants

- 5 ministries: MALR, MWRI, MSHT, MEFT, and MPE
- Private sector
- RDI, EPIQ: Design and implementation of reforms (benchmarks)
- MVE: Verification of accomplishments, impact assessment USAID

APRP Reform Process

- Five annual tranches of benchmarks (1997-2001)
- 242 indicators (benchmarks, tranches I & II)

Classifying Reforms

- By commodity
- By objective

Main Thrusts, by Commodity

• Cotton	51
• Seed	22
• Water Management Policy	18
• Rice	14
• Information	12
• Pest Control	11
• Institutional Development-Public	11
• Water Quality	10
• Research/Extension	10
• Horticulture	9
• Subsidies, Taxes	9
• Water	9
• Fertilizer	8
• Sugarcane	4
• Wheat	3
• Cooperatives	3
• Regulation	3
• Other	35
Total	242

Main Thrusts, by Objective

• Regulation	34
• Privatization/Private Investment	33
• Liberalization - Marketing	24
• Water Management Policy	22
• Research/Extension	22
• Trade and Tariffs	18
• Institutional Development - Private	14
• Information	14
• Institutional Development - Public	11
• Water Quality	10
• Production	9
• Liberalization - Pricing/Subsidies	8
• Food Security	8
• Farmer Cost Sharing	5
• Government Services - Marketing	4
• Cooperatives	3
• Land	3
Total	242

Details of Main Thrusts, by Commodity

- **Cotton**
 - Market liberalization in lint and yarn
 - Privatization of gins and spinning companies
 - Support for cotton logo development
 - HVI testing of quality and dissemination of results
- **Seed**
 - Faster, cheaper registration, imports of new horticultural varieties, mostly vegetables
- **Water Management Policy**
 - Improved use of available water through more effective, decentralized management
- **Rice**
 - Conservation of water through adoption of short-season high-yielding varieties
 - Privatization of mills, and some market liberalization
- **Information**
 - Enhancement of scope of data collected and improvements in methods of collection
- **Cotton Pest Control**
 - Shift in GOE role to regulation, quality control
 - Private sector to provide all goods, services
- **Water Quality**
 - Strategy development
 - Establishment of policies
 - Revision of basic law for drainage re-use
- **Research/Extension**
 - New role for public extension workers; introduction of private extension services

- **Horticulture**
 - Allow private cold storage in airports
 - Coordinated inspections of imported refrigerated containers
 - Renewal of planting materials
- **Fertilizer**
 - Liberalization of distribution
 - Reduction of import tariff
 - Privatization of production
- **Institutional Development-Private**
 - Support for advocacy councils and trade associations
 - GOE technical, financial support for development
- **Sugarcane**
 - Plans, programs to enhance efficiency of irrigation water use in production of sugarcane
- **Wheat**
 - No price restrictions on commercial flour
 - Reduce leakage of subsidized flour by mixing maize at mill

Some Successful Benchmarks

- Private sector entry into cotton marketing
- Privatization of cotton processing
- Crop-related water management, conservation
- Data collection, dissemination
- GOE withdraws from cotton pest management
- Promotion of private policy advocacy groups
- Restocking of the Nile with fish

Some Longer-Run Benefits of Implementation

- Inter-ministry and inter-agency cooperation
- Building capacity
- Supporting reform champions
- Changes in attitudes and approaches

Lessons Learned

- Pilot programs effective for testing policy reforms
- Significant reform possible within gradualist framework
- Need for focus to avoid spreading implementation resources too thin
- Importance of information, analysis

Benchmarks Accomplished under APRP

Tranche	Level of Accomplishment		Percent Accomplished or Exceeded
	Exceeded and Accomplished	Partial and No Progress	
I	60	12	83
II	22	7	76
III	20	8	71
IV	26	11	70
V	32	0	100
Total	160	38	81

METHODS FOR ASSESSING THE IMPACT OF APRP

DR. GARY ENDER

Context for Assessment

- APRP: Complex policy reform program
 - Large number of reforms
 - Reforms in many different policy areas
 - Different types of reforms
- Final composition of reforms not known at beginning of program during design of impact assessment

Principles of Impact Assessment

- Not possible to evaluate every reform
- Choose (or predict)
 - Main thrusts
 - Most important types of progress
- Importance of showing causality for attribution of impact to APRP

Impact Assessment and Other Tasks of MVE Unit				
	Policy Reforms (Benchmarks)	Effects in Policy Environment	Intermediate Results	Final Impacts
Verification	Verification Reports			
Monitoring		Monitoring Reports		
	○○○○○	Causality	○○○○○	○○○○○
Evaluation (Impact Assessment)		Impact Assessment Reports		

Principles of Impact Assessment

- Integrated approach: assess impact of sets of reforms on key segments of agricultural economy
 - Impact on entire farm, not only one or two elements of production
 - Impact on entire subsector, not just one industry
 - Agriculture-SME analysis looks at “impact” in context of whole economy

Methods Used - Farm Level

- Compare
 - Quantative status
 - Opinions and awareness

Methods Used - Farm Level

- Baselines
 - EIHS (IFPRI)
 - MVE Producer Survey 1997
 - CSPP farm surveys
 - New MALR farm income data
- MVE endline surveys
 - Farm
 - Community

Methods Used - Subsectors

- Most commodity-based policy reform in APRP at level of marketing system
- Cotton, rice, wheat, fertilizer predicted as key commodities
- Method designed for marketing system analysis
 - Structure - Conduct - Performance
 - Baseline, endline studies
 - Update studies between baseline and endline (cotton, rice)

Methods Used - Cross-Cutting Studies

- Designed with hindsight about focus of APRP
- Topic: Institutional Change
 - Changes in Roles of Public and Private Sector
 - Impact on Agricultural Information System
- Method
 - Project staff, reports describe earlier practices
 - Interviews, analytical framework for process of policy reform

Methods Used - Additional Subsector

- Designed with hindsight about focus of APRP
- Topic: Horticulture-related reforms
- Method
 - Qualitative baseline available from project staff, reports
 - Interviews and analytical framework for competitiveness

USING SUBSECTOR ANALYSIS IN IMPACT ASSESSMENT

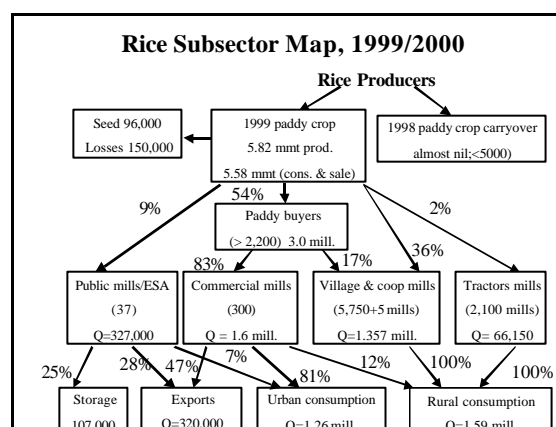
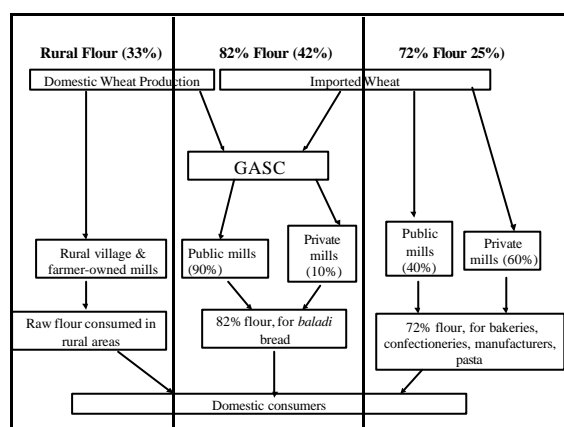
DR. JOHN HOLTZMAN

What is a Commodity Subsector?

- Food system: vertical & horizontal dimensions
- Subsector: commodity-specific vertical cut
 - Input supply
 - Production
 - Processing
 - Trading
 - Consumption

Subsector Map

- Vertical cut
- Stages of subsector
- Demand drives subsectors & food system
- Alternative marketing channels
- Coordinating agents, mechanisms
 - Channel captains: processors, wholesale traders, exporters
 - Mechanisms: contracts, markets, web sites



APRP Subsector Studies

- Cotton
- Rice
- Wheat
- Fertilizer
- Horticulture

Levels of Policy Analysis

- Macroeconomic policies: across sectors
- Sectoral level policies: agriculture, industry

- Sub-sectoral level policies
 - Specific to production & handling of one commodity or commodity group
 - Particular marketing constraints
 - Special regulatory barriers

Analytical Framework: Structure (Subsector)

- No. stages & channels
- Where does market power reside?
- Degree of public/private control
- Exchange arrangements, institutions
- Risk-sharing arrangements
- Inter-stage differences

Analytical Framework: Structure (Industry)

- No. & size of buyers & sellers
- Entry & exit conditions & barriers
- Product characteristics
- Collective & advocacy organizations
- Degree of vertical integration

Why Subsector-Specific Reforms

- Agricultural commodity subsystems have different characteristics: F&V vs. grains
- APRP efforts to improve commodity marketing systems (subsector focus)
- APRP concentrated on second- and third-generation reforms, APCP generally more “sectoral”

Analytical Framework: Conduct (Subsector)

- Efforts to shift control, rewards, risks
- Coordination activities & problems
- Inter-stage cooperation/conflict
- Information flows & distribution
- Response to forces for change

Analytical Framework: Conduct (Industry)

- Product positioning
- Pricing strategy
- Advertising, promotion
- Risk management

Analytical Framework: Subsector Performance

- Matching of supply & demand between stages
- Stability of output, prices, profits
- Technical & operational efficiency at each stage & linking stages
- Equity of returns relative to risks, investments
- Accuracy, adequacy, equity of information
- Level & types of employment

- Subsector adaptability, responsiveness

Analytical Framework: Industry Performance

- Technical & operational efficiency
- Pricing efficiency
- Product characteristics
- Progressiveness (process & product)
- International competitiveness
- Quality, wholesomeness of agricultural products (fresh, processed)

Conventional Impact Assessment

- Focuses on producer & consumer welfare
 - Farmer incomes & investments
 - Consumer budgets & food choices
- Comparative statics:
 - Who loses?
 - Who benefits?
- Prices and marketing margins

Subsector Analysis

- Change over time in the S, C, P of subsector
- Focuses on dynamics
 - Response to change: world demand, technology, exposure to best practices (GAP)
 - Market coordination (between stages)
- Far more attention to participants other than producers & consumers (mkt. coordinating role)
 - Marketing agents
 - Processors

Relationships among Structure, Conduct, Performance

- Structure affects performance: greater participation leads to workable competition
- With entry/competition, incentive for firms to diversify products & markets and innovate
- Better market coordination leads to better matching of supply & demand (between stages)
- Ability to anticipate & respond to change forces affects subsector's competitiveness

Subsector Analysis & APRP Impact Assessment

- How do agribusinesses respond to policy change?
- APRP focus on structural changes in subsectors:
 - Increase private sector participation
 - Assumed would lead to more competitive commodity markets
 - Private sector shares: key monitoring variables
- Well-targeted method to APRP focus

SOCIOECONOMIC TRENDS IN RURAL AREAS, 1992-2000
DR. GLENN ROGERS

APRP WATER POLICY REFORMS: IMPACT ASSESSMENT

ANDREW TCZAP

WPRP Overview

- WPRP is a collaborative effort of USAID/MWRI/EPIQ TA Team
- Implementation is jointly by WPAU/EPIQ TA Team
- Oversight by WPRP Steering Committee
- WPRP has achieved 100% accomplishment of all benchmarks in every tranche.

Objectives of WPRP

- Improve MWRI knowledge and capabilities to analyze and formulate strategies, policies, and plans related to integrated water supply augmentation, conservation and utilization, and to the protection of the Nile water quality
- Improve water allocation and distribution management policies for conservation of water while maintaining farm income
- Recovery of capital cost of *mesqa* improvements and to establish a policy for the recovery of operation and maintenance cost of the main system (Tranche 1)
- Increased water user involvement in system operation and management
- Introduce a decentralized planning and decision-making process at the irrigation district level

Categories of Impact

- Agricultural production and irrigation efficiency (agricultural production per unit of water)
- Privatization/participatory management (private water users participation)
- Water quantity management/decentralization
- Water quality management
- Institutional reforms

WPRP Policy Process

- Creation of working groups
 - Focused on specific problem
 - Involvement of MIWR, EPIQ, WPAU, Other Ministries involved (MALR, MOSEA, MOHP)
- Policy development
- Pilot projects
- Wider implementation

Measuring Impacts

- Constraints
 - Short life of WPRP project
 - Relatively long process for policy identification, pilot, and implementation
 - Limited evidence of national impacts
- Solution
 - Identify national impacts where possible
 - Focus on measurements of achievement

Irrigation Efficiency (MWRI/MALR)

- Short duration rice
 - National application
 - Increase in metric tons per cubic meter of 25%
- Improved irrigation on sugarcane
 - Pilot applied water saving of 15-20%
 - Increased yield of 10 – 25%
 - Increases in equipment availability for pilot expansion

Privatization and Participatory Management

- Water User Associations
 - Non IIP WUAs (Currently by Ministry decree)
 - Five pilot branch canals
- Irrigation Management Transfer
 - Four Pilots
 - Policy adopted by MWRI

Public Participation

- Pilot for canal cleaning
- Positive results
- Policy adoption by MWRI

Water Quantity

- Matching supply and demand (MWRI/MALR)
 - Process for information exchange developed
 - Calculation of water demand computerized
 - Applied to 3 million feddans
- Volumetric water delivery
 - Calibration of 166 sites
 - Volumetric delivery on 53 sites at Directorate and 43 at District levels
- Integrated Water Management District
 - All functions – Irrigation, Drainage, Mechanical, Groundwater
 - Volumetric control
 - Pilot implementation under way

Water Quality

- Intermediate drainage reuse
 - Policy adopted by MWRI
 - Allocation of MWRI funds for 20 stations
- Urban wastewater treatment
 - Joint MWRI, MALR, MOHP, MOE cooperation
 - 11 Policies adopted by Ministry
 - Prioritized wastewater treatment investment on El Salaam canal

- Environmental Impact Assessments
 - Policy adopted to include EIA for all MWRI projects in the future
- Revised Law 48
 - Joint effort of Ministries
 - Revisions under review

Institutional Reform

- Dramatic change in MWRI acceptance of policy reform
- Revision of Law 12
 - Permits WUAs anywhere
 - Authorizes cost sharing
 - Provides for Irrigation Management Transfer
- Established Irrigation Advisory Service
- Inter-Ministry communication and cooperation (MISD, Water Quality)

General Assessment

- Lengthy process by its nature
- Demonstrated impacts
 - Rice
 - Matching Irrigation Supply and Demand
 - Irrigation Advisory Service
 - Improved cooperation among Ministries
- Significant Beginnings
 - Urban wastewater management policies
 - Irrigation Management Transfer
 - Integrated Water Management District
 - Environmental Impact Assessments
 - Improved irrigation of sugarcane
- Important Achievements
 - Revisions of Law 12 and Law 48
 - Intermediate drainage reuse
 - Establishment of BCWUAs
- Remaining challenges
 - Urban wastewater treatment
 - Adoption of Revisions of Law 12 and Law 48
 - Cost sharing and/or privatization programs
 - Implement wastewater treatment policies
 - Fully integrated, demand driven irrigation system based on volumetric releases

Final Comment

- New attitudes in MWRI
 - Considering Irrigation Management Transfer
 - Looking at cost sharing
 - Integrating MWRI functions at a decentralized level
 - Cooperation with other Ministries
- Role of WPRP in encouraging those changes

THE IMPACT OF POLICY REFORM ON THE COTTON/TEXTILE SUBSECTOR

DR. ADEL MOSTAFA AND DR. JOHN S. HOLTZMAN

Overview of Presentation

- APCP accomplishments: start of liberalization
- APRP benchmarks on cotton
- APRP implementation activities
- APRP accomplishments
- Policy recommendations

APCP Benchmarks

- Farmers free to plant
- Farmers get higher percentage of world price. Large cotton area & prod. at start of APRP
- Farmers free to sell to any buyer
- Traders able to buy at any venue; pay any price
- Traders able to choose gins
- Private sector free to export

First Two Years of Liberalization (end of APCP)

- 1994/95: coops dominated cotton assembly, 87%; private sector delivered 38% to gins
- 1995/96: PBDAC rings set up; coop share drops to 17%; private sector delivered 58% to gins
- 147 companies registered to trade seed cotton
- ALCOTEXA: private sector joins & exports
- APRP laid groundwork for later (APRP) reforms

Situation in 1996/97 (start of APRP)

- Seed cotton prices > cotton lint export prices
- Public trading companies bought crop
 - Accumulated debts
 - Dominated exports
- Ginning privatization: 2 completed
- Textile company privatization underway (3)
- Public spinners dominate textile industry; limited private investment

Cotton/Textile Subsector Benchmarks

- Market liberalization (6)
- Privatization (12)
- Yarn tariffs & export pricing (5)
- Phyto-sanitary requirements for lint imports (4)
- Short-season, short-staple varieties (4)
- Pest management (5)

Cotton Benchmarks: Support Institutions & Services

- Research & extension (5)
- Market information (7)

- Agricultural Commodity Associations (5)
- 54 benchmarks with some relationship to cotton/textile subsector

APRP Implementation Activities

- Cotton pricing: deficiency payment mechanism
- Analyzed way to decrease marketing costs:
 - Eliminate farfarra in Alex
 - UD bale pressing at gins
- Lobbied for increased participation in marketing
- Lobbied for varietal map based on demand (and appropriate pricing of export varieties)
- Promoted exports: pricing, grading, HVI testing, logo
- Strengthened market information
- Improved yield forecasting (& area estimates)
- Developed alternative privatization methods
 - Leasing guidelines
 - Management contracts

APRP Success: Collaboration with CSPP/GTZ

- APRP – marketing reform, policy, trade, privatization, private investment promotion
- APRP worked across ministries at policy level
- CSPP - focuses on technical areas in production
- Collaborative studies:
 - Cotton grading/quality
 - Market liberalization
 - Varietal map; cotton logo

APRP Success: Better Under-standing of Marketing System

- Empirical information generated by sample surveys:
 - Producers
 - Traders
 - Spinners
- Periodic informal interviews
- Analysis of textile industry costs & competitiveness

APRP Challenged Conventional Wisdom

- Questioned unchallenged assumptions
- Stimulated a constructive dialogue
- Served as a neutral broker; saw the big picture
- Who will do this when project is over ?
- Current subsector strategy exercise: High Cotton Council & CSPP

APRP Success: Cotton Market Liberalization

- Economic analysis supported market reform
- Strengthened public discussion of key issues
- Supported right of private sector to set up private rings (key Tranche V benchmark)

- Strengthened private sector exporters
 - Advocacy
 - Understanding of world markets
 - Technology adoption: better cleaning, less contamination, UD bales

Exogenous Factors Contributed to Cotton Market Liberalization

- APRP important, but not due all credit
- Private sector got stronger & developed voice
- Private exporters control ALCOTEXA (2001)
- LE devaluation, 2000/01 & 2001/02: competitive advantage to private exporters
 - Seed cotton prices decrease in LE terms
 - Price lint exports below ALCOTEXA minimum export prices

APRP Success: Improving Cotton Market Information

- APRP source of market information & analysis
 - Available to all
 - Neutral broker role
- CATGO bulletins; web site (HVI data)
- Supported MALR/EAS to obtain intl. market information & improve cotton yield forecasting
- Encouraged ALCOTEXA to price exports with reference to competing growths

Sustainability of Market Information Improvements

- MALR economic analysis: limited capability
- MALR dissemination not wide or timely enough
 - Area & production forecasts, estimates
 - Situation & outlook reports
- Post-APRP, who maintains, updates web sites?
- CATGO reports, but not web site

APRP Success: Lint Imports Facilitated & Increase

- 5 benchmarks in Tranches I to III
- Consolidate, clarify MALR/CAPQ rules
- Imports expanded in 1999/00 & beyond: Provided Egyptian spinners with cheaper lint
- Makes hirsutum introduction unnecessary

APRP & Privatization of Public Textile Companies

- Developed strategies to reduce inventory & debt
- Developed privatization guidelines; served as honest broker & facilitator
- Actual results disappointing
- Privatization stalled by 1999
- But some private investment in spinning
- Private spinning successes: Alex S&W, Unirab, DIP

General Lessons of Cotton Policy Reform

- Subsector strategy: difficult to reach consensus
- Pursue more than one tactic to reach objective

- Even if benchmark not accomplished, not necessarily failed:
 - Reformulate benchmark & submit later
 - Shift to implementation activity for a tranche
 - Reintroduce later after building behind scenes consensus
- Simply getting an issue on the policy agenda can be key:
 - Initial rejection (time not ripe; lack support of sr. GOE official)
 - Provide sound analysis to technocrats & private sector, who can use it to push reform

APRP Era Accomplishments

- Seed cotton prices aligned with world prices
- Private sector shares:
 - Seed cotton buying: 15% ('98) to 44% ('00)
 - HSU share 26% (2000) and 21% (2001)
 - Ginning: 0% (1995) to 33-42% (1997-2001)
 - Exports: 27-28% (1998, 1999), 50% (2000), 70% (2001/02)
 - Yarn output: 22% (1996); 44% (2000)

Recent Marketing Seasons: Threats to Liberalization

- Cotton Marketing Supervisory Committee
 - Allocated PBDAC rings & set rules
 - Limit private participation in 2000/01
- HE Youssef Wally & Youssef Boutros Ghaly announce private sector free to buy within/outside rings
- Outcome: highest private participation under APRP
- Increased transparency in implementation of cotton marketing decrees
- ALCOTEXA controlled by private sector as of Jan. 2001
- 2001/02: set minimum export prices high
- Private exporters responded by deeply discounting prices
- >70% shipments by private exporters as of early May
- Two firms export > 50% of total shipments

Large Carryover Stocks

- Back to excess supply part of cycle; 3.5 mlk
- Someone must bear storage & finance costs
- Represents misallocation of resources
 - Overproduction & inappropriate pricing of certain varieties (varietal map, ALCOTEXA prices)
 - Limited domestic demand for ELS, LS
 - Poor international mktg? Contamination?
 - Limited world demand for ELS, LS ?

Recommendations: Exports

- Reduce carryover (overhangs world market)
- Monitor increased concentration in lint exports

- Rules for \$ to £ conversion should be same for all exporters
- ALCOTEXA export prices: indicative, not mini-mum (and binding)

Recommend Increase Industry Input into Varietal Map

- Problem of carryover stocks linked to varieties planted & their pricing
- Little (private) industry input
- Recommendations:
 - Broader representation on variety committee
 - Required presentation of proposed plan for next year to broad audience
 - Allow sufficient time to modify the plan

Recommendations: Seed Multiplication & Buying

- Objective: lower seed requirements & area
- Huge area allocated to seed production
- HSU bought 26% (2000) & 21% (2001) of crop
- Recommend return to old system, where:
 - Seed selected by MALR in field
 - Tracked to gins & in ginning process
 - Multiple buyers deliver seed to many gins

Recommendation: Strengthen Cotton Traders' Committee

- Committee for registered seed cotton traders
- APRP has not worked with Committee
- Weak as an advocacy organization
- Helped allocate PBDAC rings before 2000
- Excluded in 2000 or 2001
- Needs to participate in key implementation decisions about annual cotton marketing decree

Recommendations: Pricing

- Set producer floor prices lower for seed cotton
- Change minimum export prices to indicative prices
- Spinning industry:
 - Encourage cheaper lint imports
 - Abandon two-tier pricing of Egyptian lint to domestic spinners

Recommendation: Privatize Cotton Trading Companies

- Private sector cannot buy all seed cotton
- Public trading companies needed in transition to private sector-led system
- Privatize one cotton trading company per year
- Retain 1-2 public companies as buyers of last resort

Improving Productivity

- Fund assessment of cotton breeding program
 - Complement fine CSPP work on cotton agronomy, extension, pest management
 - Questions

- ◆ Why are cotton yields so low?
- ◆ How improve them rapidly?
- ◆ What can Egypt learn from other breeding programs?

Next Five Years: if Policies Don't Change

- Large carryover
- Large crops: big public trading & ginning shares
- Public trading companies: higher stocks & losses
- Public trader export shares remain modest
- Public spinners: decreased use of E. cotton
- Public sector bank financing may shrink for public trading & spinning companies

Summary of Main APRP Accomplishments

- Improved economic analysis & policy dialogue
- Increased transparency in GOE decision-making
- Greater market liberalization
- Increased private sector market shares
- Facilitated lint imports
- Helped promote lint exports
- Helped improve market information

Summary of Main Recommendations: Policy

- Varietal map: open debate; include industry
- Greater role for Cotton Traders
- Lower area to seed; reduced role for HSU
- Revive privatization: trading, ginning, spinning
- Remove minimum lint export prices
- Abandon discriminatory lint pricing to spinners
- Promote Egyptian lint & yarn

THE IMPACT OF APRP ON THE WHEAT SUBSECTOR

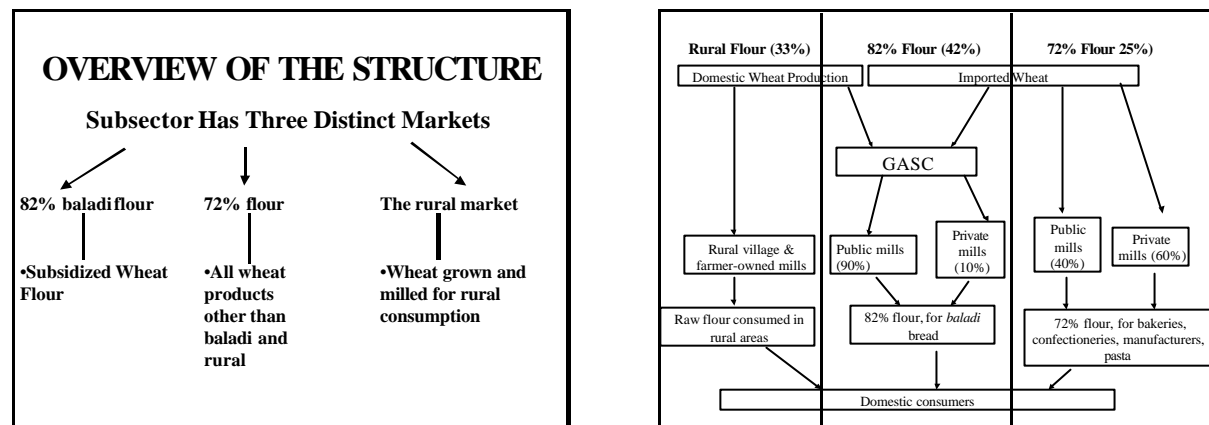
ROGER POULIN AND DR. ABLA ABDEL-LATIF

Overview

- APRP Benchmarks
- Structure of the Wheat Subsector
- Changes in subsector structure, conduct and performance
- Recommendations

APRP Benchmarks

- Two benchmarks related to private sector participation
- Eight benchmarks related to the food subsidy program
- The baseline study: structure, conduct, performance (1997)
- This study looks at the changes and assesses the impact of the APRP wheat benchmarks

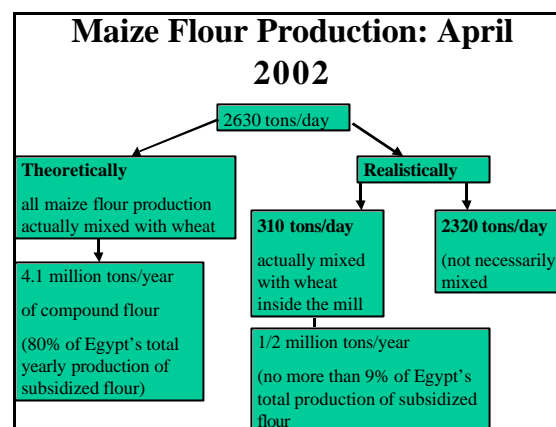
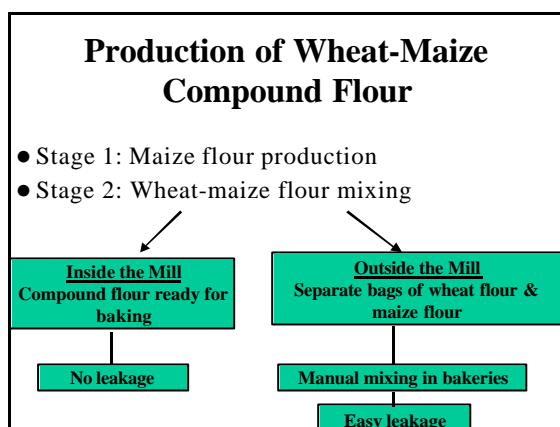


Overview of the Structure

- Subsector is dominated by the baladi flour market
 - 82% baladi flour ➡ Total government control
 - 72% flour & rural market ➡ Unregulated but constrained by controls on baladi flour
- Restrictions on 72% and rural markets
 - Fixed producer price for wheat
 - 72% flour mills prohibited from using domestic wheat
 - Unsubsidized wheat flour can only be 72% extraction
 - Mills can produce 82% or 72% flour, but not both
- Result: complete separation of the 3 markets
- Important exception: leakage of flour from subsidized to unsubsidized market (30 to 45%)

Changes in Structure

- 82% flour milling:
 - Conversion of stone mills to cylinder
 - Increased use of wheat-maize mix in baladi flour



Maize Flour Production: April 2002

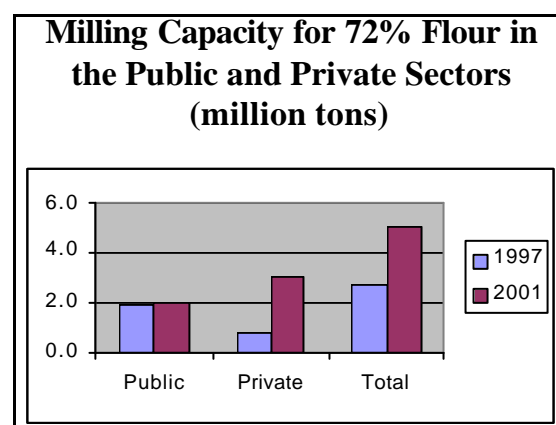
- Public
 - 95% of total production
 - Primarily stone mills
 - 2 mills out of 33 actually mix maize & wheat flour inside mill
 - Mixing only in modern mills
- Private
 - 5% of total production
 - Primarily new cylinder mills
 - All 6 mills mix wheat and maize flour inside mill
 - Mixing in all mills irrespective of level technology

Maize Flour Production: April 2002

- Important conclusions:
 - Public milling companies have no tendency to mix wheat & maize flours except in modern mills
 - Full realization of wheat-maize mixing target nationwide is tightly linked to, if not conditional upon, full conversion of stone mills to cylinder or disk mills

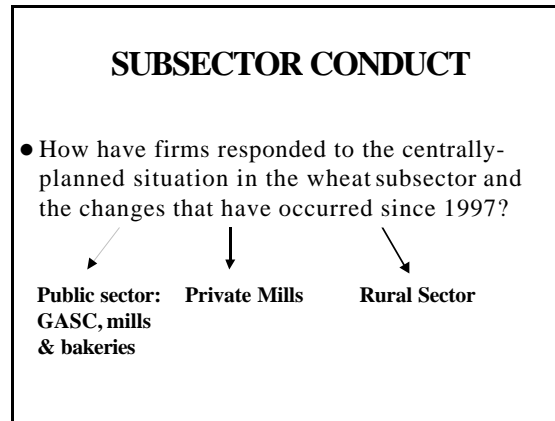
Changes in Structure

- 72% flour milling:
 - Large increase in private sector milling capacity
 - Institutional changes in public sector milling



Distribution of Productive Capacity between Public & Private Sectors

	Public	Private
1997	71%	29%
2001	39%	61%



GASC - Part of MSHT

- Reduced deliveries of baladi flour from 4.7 million tons in 1997 to 4.2 million tons in 2001
- Increased purchases of domestic wheat from 1 million tons in 1997 to 2 million tons in 2001
- Reduced wheat imports from 4.8 million tons in 1997 to 1.7 million tons in 2001

Public Sector Milling Companies - Driven by Government Decisions

- Upgrading their stone mills for 82% flour, despite negative returns on investment
- Continuing to accept milling fees that are increasingly below cost
- For 72% flour, trying to compete on quality but competing mostly on price

Baladi Bakeries - Reacting to Government Controls

- Increased leakage due to increased losses
- Increased incentives to leak due to the currency devaluation
- New “special” baladi bakeries

Private Sector Mills - Market Driven

- Investing heavily in 72% flour capacity
- Investing in product differentiation equipment and storage
- Competing on quality, customer service
- Not upgrading their stone mills for 82% flour; low milling margin excludes them from any significant role in the baladi flour market

Rural Sector - Constrained Market

- Farmers are choosing to sell increasing percentage of their wheat production to GASC
- Combined with reduced deliveries of baladi flour to rural areas, this implies declining wheat consumption for rural households

Wheat Production and Deliveries to Gasc, by Region (000 tons)

Region	1997			2001		
	Production	Deliveries		Production	Deliveries	
	Quant.	Quant	%**	Quant.	Quant	%**
L. Egypt	2,900	492.5	17.0	3,300	1,265	38.3
M. Egypt	1,300	427.4	32.9	1,400	633	45.2
U. Egypt	1,000	60.2	6.0	1,100	88	8.0
New Lands	600	-	-	500	27	5.4
Total	5,800	980.1	16.9	6,300	2,013	32.0

White Maize Production and Deliveries to GASC (000 Tons)

Region	1997			2001		
	Production *	Deliveries	%	Production	Deliveries	%
Lower Egypt	3,017	98.8	3.3	3,417	328.9	9.6
Middle Egypt	1,768	50.2	2.8	1,848	64.4	3.5
Upper Egypt	841	38.8	4.6	780	108.4	13.9
Total	5,626	188.0	3.3	6,046	501.7	8.3

Subsector Performance

- Four Criteria
 - Efficient use of resources
 - Profitability
 - Ability to cope with shocks
 - Market efficiency

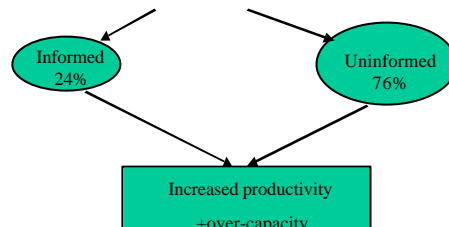
Efficient Use of Resources

- Public Sector is investing in 82% flour milling despite negative returns
- According to MSHT sources, leakage of subsidized flour to the unsubsidized market is increasing
- GASC decisions to import wheat are not based on world prices compared to domestic prices
- Mills producing 72% flour cannot buy their wheat from the least expensive source

Efficient Use of Resources

Investments by private sector in 72% milling

First wave: 1997, 1998 → Efficient
Second wave: starting from 1999 → it depends



Profitability

- Public**
 - Increasing losses in 82%
 - Small positive profits in 72%
 - Additional Profits from other activities
 - Small profits on the overall??
- Private**
 - We can't tell on 72%
 - Positive profits on 82% stone mills
 - Negative profits on 82% cylinder mills
 - Village mills are continuing to struggle

Ability to Cope with Shocks

- External shock: devaluation of LE, dollar shortage → LE wheat price for 72% flour increasing
- Coping with shock:

<u>Public</u>	<u>GASC</u>	<u>Private</u>
Receiving help from HC on the basis of social responsibility	Not purchasing more domestic wheat	Prevented by government policy from purchasing domestic wheat instead of importing

- Reaction to shock constrained by Gov. policies

Market Efficiency

- The 82% flour production marketing chain is not subject to any market forces
- Farmers are virtually isolated from all wheat market forces outside of rural areas
- Markets are functioning best for 72% flour, but with significant distortions

Impact of APRP Benchmarks

- Increased wheat-maize flour mixing at the mills and consequent reductions in leakage
- The other benchmarks were all met, but they did not lead to any significant changes in subsector structure, conduct or performance.

Summary of Findings

- Distribution of subsidized flour continues to decline, mainly in rural areas
- Leakage of subsidized flour is increasing; progress in implementing the wheat-maize mixing program has been slow
- Wheat consumption in rural areas declining
- Wheat gap has declined by 1 million tons
- Production capacity for 72% flour has increased by 91 percent; 50% excess capacity despite increased consumption
- Private sector share of total production capacity increased from 19% to 37%
- Growing losses in 82% flour milling threaten viability of the flour subsidy program
- Entire milling industry adversely affected by excessive government controls and interference
- Keeping the three wheat markets separate reduces the efficiency of resource allocation throughout the entire subsector

Recommendations

- Full and expeditious implementation of the wheat-maize mix
- Allow public milling companies to use private services
- Reduce ambiguity and haphazardness in government policy vis a vis the public sector milling companies
- Improve the wheat flour subsidy program and redefine social responsibility of public firms
- Restrict public milling companies to production of subsidized flour
- Take measures to bring subsidized flour milling fees in line with actual cost

THE IMPACT OF POLICY REFORM ON THE RICE SUBSECTOR

DR. JOHN HOLTZMAN AND DR. ABDEL RAHIM ISMAIL

Overview of Presentation

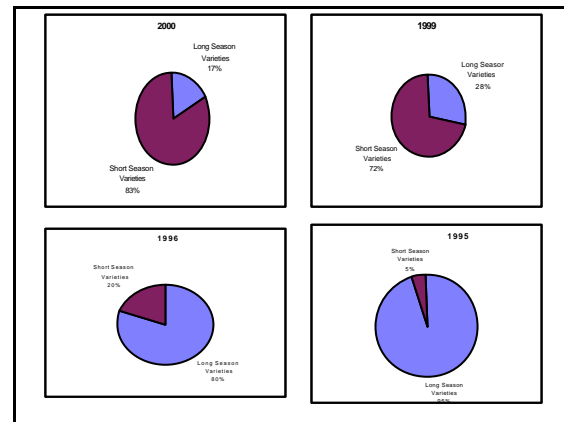
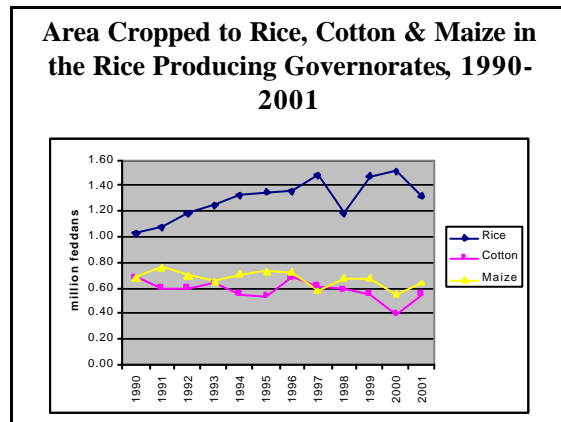
- Review of APCP policy reforms
- Summarize selected findings of baseline study
- APRP Review: policy issues, benchmarks, implementation activities/successes, changes
- Rice milling industry changes
- Lessons of liberalization & privatization
- Policy recommendations
- Summary of major APRP impacts

APCP Policy Reforms of Early 1990s

- Crop area controls removed
- Mandatory rice deliveries abolished
- Paddy & rice prices were freed to vary
- Public rice mills no longer guaranteed paddy
- Private sector allowed to trade, mill & export

Subsector Baseline Study Findings

- Rice area & production increased steadily from 1980s
- Short-season varieties were beginning to replace long-season varieties by mid-1990s
- Rice consumption increased between 1990/91 & 1997, especially in Upper Egypt



Marketing & Trade Policy Issues of Early APRP

- Market liberalization (2)
- Privatization (4): how, when, which method, what cost?
- Would public millers receive advantages?
 - ▶ Preferential access to credit
 - ▶ Continue to lose money
- Import tariff on rice (2)

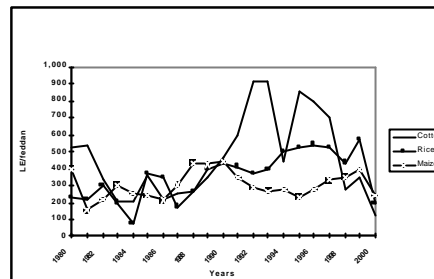
What was Achieved?

- Domestic rice trade liberalized by 1996/97
- Exports higher in 1990s than in 1980s
- Massive private sector investment in rice mills, 1995-98
- 8 public milling companies privatized as ESAs
- Tariff not reduced. Domestic protection high

Changes during APRP: Area Cultivated

- Predicted: Paddy area & output decline from 1997
- Actual: Increased area & output in 1999, 2000 & 2002 (?)
- Recent variability in rice area, as producers substituted rice for cotton/maize following years of high rice prices

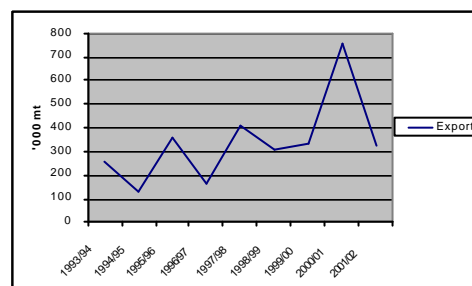
Real Net Revenue (LE/ feddan) for Major Summer Crops, 1980-2000



Changes during APRP: Rice Exports

- Predicted in Baseline: domestic rice consumption increases; surplus export declines
- Consumption partly a function of crop size & low paddy prices
- Actual: Exports trend upward, but variable
- Exports surged in 2000/01 (to 755,000 mt); some diversification

Rice Exports, 1993/94 to 2001/02



Changes during APRP: Rice Imports

- Predicted in Baseline: Tariff reduction & greater imports
- Actual: Tariffs unchanged, so limited imports
- Large imports during 1998/99 rice “crisis”
 - ▶ Rice prices surged in spring 1999
 - ▶ Chinese medium-grain rice imported. Not well accepted. Some re-exports
 - ▶ Imports virtually nil since

Water and Support Service Policy Issues of APRP

- Rationalization of water use on rice & policy dilemma:
 - ▶ Rice as competitive export crop
 - ▶ Rice as an inefficient user of water
- Need for better advocacy organizations:
 - ▶ Which one? Where (institutionally)?
 - ▶ How to organize & finance?
 - ▶ Policy agenda

Benchmarks in Support of Rice Subsector

- Water savings in rice cultivation (4)
- Reducing mismatch of irrigation deliveries (1)
- Water management (1)
- Research & extension (5)
- Improving market information (6)
- Strengthening commodity associations (4)

APRP Success: Coordination of Short-Season Variety Planting

- Short-season varieties introduced in 1995
- APRP worked with MALR & MWRI
- Benchmarks & implementation activities:
 - Improve timing & efficiency of water distribution
 - Coordinate SSV planting & water delivery along particular irrigation canals
- 13% estimated water savings

APRP Success: ACC Rice Subcommittee Advocacy

- Significant membership
- Skill in advocacy. Access to MFT
- Rice export success: 755,000 mt in 2000/01: some new markets, regained “lost” markets
- Exporters are the most influential members & advocates
- Considering ways to stabilize paddy prices

Changes during APRP: Advocacy

- Predicted: Rice Federation created to supersede Rice Branch of Cereals Chamber
- Actual: Rice Federation not legally approved
- Rice Subcommittee of ACC became industry voice, dominated by large exporters
- Rice Branch of the Cereals Chamber (EFI) represents millers
- New Rice Association in Alexandria

Capacity & Utilization of Rice Mills, 1998/99

	ESA Mills	Commercial Mills	Farrakha
No. Mills	37	250-300	2500-3000
Capacity (mmt/yr.)	1.6	3	2.8
Capacity (%)	21%	39%	36%
Actual Milling (mmt/yr.)	0.1	2.1	1.7
Utilization (%)	6%	70%	63%
Share Exports (%)	30%	70%	

Key Developments in Rice Milling Industry during 1990s

- APCP: paddy trade liberalized, competitive
- Public sector mill purchases & throughput declined significantly by 1993/94
- Huge investment in private mills, 1995-1998
- Most paddy (96%) milled by commercial mills & small village mills by 1998/99

Public Milling Company Privatization

- Public mills offered for sale in 1997, 4-5 years after start of rice market liberalization
- Private investment in commercial mills already underway. No priv. sector interest
- ESA privatizations in 1998/99:
 - 7 of 8 companies (1 later)

- ▶ Employee Stakeholder Assoc.: “own” 90%

APRP Support to ESA Rice Mills

- RDI organized & ran training workshops:
 - ▶ ESA concept: employee rights & responsibilities
 - ▶ Corporate governance
 - ▶ Organizational development

ESA Mills under Control of Food Industries Holding Comp.

- Weekly meetings at HC headquarters, Cairo
- HC has majority of seats on ESA boards
- FIHC guarantees finance (public bank loans)
- FIHC brokers government-to-government export deals: Libya & Syria
- FIHC retains former public company managers
- Little innovative thinking or new directions

ESA Mill Sustainability

- Only 2-3 of 8 ESA mills could survive on own:
 - ▶ Most ESA mills perform poorly
 - ▶ Obtaining finance would be difficult
 - ▶ Only 2 ESA mills pay installments
- Do ESA rice mills compete fairly, and on an equal basis, with private mills?

Changes in Milling Industry Structure

- Structure -- modest changes since 1997/98:
 - ▶ Continued entry
 - ▶ Still excess capacity in milling
- Successful early investments encouraged too much later investment
- Commercial mill closures (27% of 1998 sample)

Milling Industry Conduct & Performance

- Rice milling very competitive
- Milling returns depend heavily on capacity utilization (under-utilized mills close)
- Examples of industry innovation:
 - ▶ Cheaper Chinese equipment guarantees a quick return on investment
 - ▶ Sortex units improve milled rice quality
 - ▶ Improvements in packing (retail packs)

Changes in Subsector Performance

- Paddy trade competitive
- Reports of hoarding: true or exaggerated ?
- Higher yields; some milling/quality problems
- Large areas planted to paddy in 1999, 2000
- Output and price volatility since 1998
- Export record in 2000/01, with subsidies
- Some exporters target higher value market niches (supermarkets, other retail outlets)

Impacts of Rice Liberalization

- Paddy market liberalization decisive & rapid
- When prices freed, rice profitability increased steadily; farmers shifted from cotton to rice
- Uneven pace & extent of liberalization across subsectors (rice & cotton) during 1990s
- Public mills lost market share once paddy deliveries no longer compulsory
- Rice marketing coops stopped buying

Lessons of Rice Liberalization & Privatization

- Privatization late, so few bids. Privatization should follow liberalization within 2 years
- Private sector response: invested in commercial mills: 88 in 1995 & '96 & 48 in 1997 & '98
- Private sector increased export mkt. share
- High import barriers:
 - Protect domestic producers & mills
 - Led to over-planting, over-investment

Policy Recommendations

- Rice production is highly profitable for farmers, but uses a lot of water
 - Pricing water would lower its profitability
 - Some farmers would shift to cotton
- Administrative controls on area planted do not work & never enforced
- Rice tariff should be lowered or removed
- Drop subsidies (if cannot sustain); expectation can be potentially de-stabilizing (2001/02)

Key Policy Issue for 2002/03: Reduce Rice Price Volatility

- ACC Rice Subcommittee meeting, April 2002
- Proposed new role for Rice Marketing Coops in assembling paddy crop
- New role for PBDAC: finance, storage ?
- Would substituting coops for paddy traders:
 - Foster competition ?
 - Increase employment ?
 - Lower paddy marketing costs ?

Major Impacts of APRP

- Created awareness of (coming) water scarcity
- Convinced all parties of the need to better balance water supply & demand
- Strengthened capacity of MALR/MWRI to manage & coordinate water distribution
- Support to ACC; strong Rice Subcommittee
- Strengthened management of ESA rice mills
- APRP work on cotton market liberalization:
 - Redressed uneven rates & extent of liberalization in rice & cotton subsectors
 - Helped make cotton cultivation more attractive to farmers (2001 & 2002)
- Complete cotton market reform to avoid:
 - Excess area planted to paddy
 - Re-emergence of large rice surpluses that require subsidies for disposal

FERTILIZER PRODUCTION AND MARKETING IN EGYPT

DR. ABDEL-HAMID Y. SAAD

Brief History

- **Before 1991**
 - Monopoly of PBDAC
 - No private traders
- **1991-1994**
 - Declining role of PBDAC to 10% in 1994
 - Increased number and role of private traders, 6,000 and 70%
 - Cooperatives 20%
- **1995 Crisis**
 - Breakdowns in Talkha factory
 - Repairs& maintenance in Abou Qir factory
 - Increased exports
 - Shortage in the domestic markets
 - Domestic prices doubled
 - Private traders were blamed for that increase
 - 1.25 million tons were imported duty free
 - PBDAC re-monopolized trading

APRP Role

- **Tranche I**
 - I.B.1. Reduce the tariff on nitrogen fertilizers
 - I.B.2 Review ex-factory prices and set them in light of border prices
- **Tranche II**
 - Fertilizer factories sell fertilizers without quotas for any group

Subsector Structure: Production		
Percentage of N. Fertilizer/company		
Company	1995/96	2000/2001
1. Abou Qir	51.7	65.2
2. Talkha	37.9	5.1
3. El-Delta		24.2
4. El-Cook	1.6	0.2
5. Qima	8.8	5.3
Total (000 tons)	6747.3	8380.3
Total %	100	100

Public and Private Shares

- Before 1996, N. and Ph. fertilizer factories were all public, no existence for the private sector
- By 2002, all Ph. factories are private (100%)
- By 2002, 75 % of N. factories are private

Structure: Distribution

Quotas for Allocation of N. Fertilizers				
Year	Domestic Sales*	PBDAC	COOPS	Private
1995/96	6529	89	2	6
1996/97	6484	59	19	21
1997/98	5428	20	21	54
1998/99	5975	9	15	75
1999/20	6386	9	13	77
2000/2001	6980	11	19	69
Feb. 2002	N.A.	30	25	50
Mar-02	N.A.	50	20	30

Impact of Recent Policy Changes

- Great disturbance to the relative stability of the market that existed in the last few years
- Great losses for private traders who have high fixed and operational costs to handle 70% of fertilizer
- Some traders will reduce employment to reduce costs, thus increasing unemployment

Conduct

- Production and pricing policies
- Distribution policies
- Competition in production(5 companies)
- Competition in distribution (6,000 traders)

Performance						
X- Factory Prices for N. Fertilizers						
	(LE/Ton)					
Abou Qir Co. :	1995/96	1996/97	1997/98	1998/99	1999/20	2000/2001
Urea 46.5%	450	495	495	495	495	450
Ammonium Nitrate 3.5%	375	399	399	399	399	399
Talkha Co.:						
Urea 46.5%	450	450	495	495	410	420
Ammonium Nitrate 3.5%	350	380	380	380	365	365
Ammonium Sulfate 20.6%	360	360	360	360	295	340
Nitrolin 33.5%	380	399	399	399	375	380
Qima Co.:						
Ammonium Nitrate 33.5%	385	385	410	410	365	385

Performance			
Prices Paid By Farmers for N. Fertilizers*			
Location	Urea 46.5 %	A. Nitrate 33.5 %	
Menoufia -Coop	525 (A.Q.)	458	
Menoufia - Ag. Coop	480 (Talkha)	510	
Menoufia - Private	(A.Q.) 580	(A.Q.) 500	
Menoufia - Private	(Talkha) 560	(Talkha) 500	
Menoufia - Private	550	500	
Menoufia - Private	(Talkha) 560	(A.Q.) 505	
Menoufia - PBDAC	Suez	545	
Dakahlia - PBDAC	(A.Q.) 532	(A.Q.) 532	
Dakahlia - PBDAC	(Talkha) 503	(Talkha) 454	
Dakahlia - Coops	(A.Q.) 532	(A.Q.) 470	
Tahrir -Private	550	510	
* LE /Ton as of third week of May 2002			

Performance			
Domestic and World Prices for Urea			
Year	Domestic Price	World Price	NPC
1995	450	716	0.63
1996	495	670	0.74
1997	495	467	1.06
1998	495	352	1.41
1999	450	291	1.55
2000	450	484	0.93
2001	450	985	0.46

APRP Impact

- Prepared benchmarks to increase the role of the private sector and increase competition
- Conducted several meetings with producers and distributors to harmonize the functioning of the subsector

Recommendations

- Accurate and objective market information (collection, analysis and dissemination) is a necessity for stable and effective agricultural policy
- Domestic prices should be adjusted periodically with world prices
- PBDAC should be responsible for strategic storage, not to trade in fertilizers

APRP IMPACTS ON EGYPT'S HORTICULTURAL EXPORTS
JOHN E. LAMB

**THE ROLES OF THE PUBLIC AND PRIVATE SECTORS IN EGYPTIAN
AGRICULTURE: CHANGES PROMOTED BY APRP
DR. DERICK W. BRINKERHOFF, DR. NABIL HABASHI,
DR. ADEL MOSTAFA, AND DR. JOHN HOLTZMAN**

Objectives of the Impact Study

- Trace the impacts of APRP assistance in changing the roles of the public & private sectors in agriculture.
- Draw lessons & conclusions for policy reform programs.

Impact Assessment Categories

- Delegation of functions to the private sector.
- Capacity-building of the public and private sectors.
- Private-sector participation in policy.

Selected APRP Benchmarks

- Government withdrawal from cotton pest management.
- Promotion of, & cooperation with, trade associations.
- Provision of horticulture export support services.
- Expanded role for agricultural cooperatives.
- Increased government capacity in information provision & dissemination.
- Private-sector participation in policy dialogue & decision-making.

Policy Implementation

- Policy reform is more than decrees, laws, & regulations.
- Technical content, plus how to bring about change.

APRP Roles

- Both technical & process expertise.
- Neutral broker.
- Policy interlocutor (design).
- Reform implementation support strategy.
- Leveraging resources & impacts.

Delegation: Cotton Pest Management

- Before: MALR made all decisions for farmers.
- Legal & regulatory changes.
- Participatory reform strategy development.
- Pilot tests: Daqahleya, Menofeya, Beheira, Kafr El Sheikh.
- New registration regulations, manual.
- Training program: EATSAP, Crop Life Egypt, farmers, MALR staff.

Delegation: Horticulture Export Support Services, Research & Extension

- Before: top-down, weak feedback between researchers & farmers, low quality extension, budget pressures.
- Assessment & strategy to focus on export horticulture.
- Training extension agents, establishing contract farming, improving packing & transport infrastructure, govt-private sector cooperation.
- Pilot test: Ismaileya - partening with HEIA
- More pilots: Luxor, Qena, Giza, Beni Suef.

Results: Ismaileya

- Improved cooperation: MALR extension service, coops, farmers, exporters.
- Better technical information to farmers.
- Private sector paying for extension services.
- Increased export contracts (e.g., green beans, potatoes).
- Increased exports.

Delegation: Agricultural Cooperatives and Cotton Marketing

- Before: govt control, specialized coops collected seed cotton crops.
- Governorate-level field crop coops registered as private cotton traders, competition with PBDAC sales rings.
- Seed cotton marketing is mixed public-private market, with increasing private share: 31% of 2001/02 crop purchased by coops of all types.
- Competition emerging between PBDAC rings & coops, & among coops.

Capacity-Building: Cotton Pest Management

- Issues: private-sector capacity, mistrust, top-down dominance.
- Training in roles, responsibilities, awareness.
- Awareness +/- planning workshops.
- Training workshops, EATSAP & Crop Life Egypt: development of manuals, training materials, course design for training of trainers.

Capacity-Building: Agricultural Cooperatives

- Issues: top-down control/lack of autonomy, poor management, bad service to members.
- APRP focus on management autonomy & MALR-paid staff.
- Pilot test in 2 governorates, 4 coops each: coops choose own BOD without govt nominations, no MALR staff.
- Training program for BODs, coop managers, & accountants; awareness/start-up workshops for coop leaders local MALR officials (2001-2002).

Capacity-Building: Trade Associations

- Issues: need for interest aggregation, policy dialogue with govt.
- Trade associations need: right organization and skills, conducive forums for interaction, resources.
- Right organization: ESAS, strategic planning, policy analysis, priority-setting, code of ethics.

- Forums: agricultural commodity council (ACC).
- Ministry of Foreign Trade: support to associations for export promotion, cotton logo, funding.

Capacity-Building: Statistical, Economic, & Trade Information

- Issues: information accuracy, availability, dissemination, utilization.
- Farm income and crop-yield forecasting for cotton & wheat: MALR/Economic Affairs Sector.
- New farm income methodology, training, information dissemination (9 governorates published reports for 97/98 & 98/99 seasons), expansion to other governorates.
- New crop-yield forecasting methodology, joint EAS-APRP pilot, EAS now using methodology on its own.

Capacity-Building: Water Supply & Use “Mismatch”

- Issues: water releases from Aswan Dam did not match farmers water use needs, cropping patterns & calendars inaccurate, acrimonious relations between MALR & MWRI.
- 1998--APRP support to joint working group, study tours (US Western states), start-up workshop.
- 1999--pilot tests in 5 governorates for bottom-up information collection & reporting.
- 2000--review & planning workshop.
- 2001--expansion to more irrigation districts; planning, training & review workshops; formal joint agreement signed by ministers.
- 2002--expansion & planning for national roll-out.

Private-Sector Participation in Policy

- Issues: predominance of state interests, lack of private sector input to policy.
- ACC Rice and Grains Subcommittee: formed in 2000 to countervail govt entity, Rice Branch. With decline in world rice prices in 2000/01, Subcommittee argued for export subsidies by preparing policy brief & presenting to Cabinet. Cabinet approved.
- ESAS: policy advocacy focus on legal and regulatory framework. Successes: seed variety registration, importation of new varieties, IPR.
- Cotton traders and cooperatives: protest against arbitrary rulings by Cotton Marketing Supervisory Committee to limit private sector allocation of sales rings.

Results: APRP Benchmarks with Clearly Visible Benefits

- State withdrawal from cotton pest management.
- Promotion of trade associations.
- Effective use of irrigation system information.
- Improvement in agricultural statistics.

Results: Benchmarks with Some Initial Benefits/Potential for Future Benefits

- Reorientation of agricultural research & extension services.
- Establishment of the private-sector operated cold storage facility at the Cairo airport.
- Promotion of cooperatives' autonomy & functioning (including cotton marketing).
- Promotion of private-sector participation in policy-making.

Lessons Learned

- Public & private sectors need to work together as partners to take advantage of distinctive competencies/capacities.
- Policy projects can serve as an important impetus for initiating change, their budget support is a motivator for pursuing reform.
- Egyptian government's gradualist implementation strategy has led to series of short-run successes, but some interpret it as ambivalence and weak commitment. For long-term benefits, reformers and donors need to "stay the course."
- Demand side of policy reform is critical. GOE commitment/ability to supply reform enhanced by pressure from private sector & civil society.
- Private-sector demand-making capacity is not always used in support of intended agendas of reforms.
- When using pilots as an implementation strategy, scaling up is critical to generating intended program impacts. Key challenges:
 - Resources to facilitate the expansion.
 - Existing capacity insufficient to support scaling up.
 - Interest group politics, whose effects can to some extent be mitigated in pilots, emerge more forcefully with scaling up.

Implications for Donors and the GOE

- Pay attention to the interest group dynamics that shape policies & institutions.
- Strengthen indigenous capacity to analyze policy issues.
- Process assistance roles are very important for reform implementation.
- Policy reform is a long-term effort, which requires long-term investment and commitment.
- With USAID/Egypt resources declining, targeted interventions can help to make long-term investment effective. Some suggested targets:
 - Business associations,
 - Cooperatives,
 - Customs agency administrative reform.

THE IMPACT OF APRP ON AGRICULTURAL INFORMATION

DR. ROLLO EHRICH AND DR. MORSY ALI FAWZY

Background

- MALR/USAID developed APRP in a collaboration mode. Purpose is to liberalize the agricultural sector. Free markets are information driven. Recognizing this, APRP began a series of information generating activities, principal client in this effort has been MALR/EAS

Objectives

- Describe and analyze impact of APRP on creating an improved agricultural information system

Outline of Presentation

- Role of data & information in free-market economy
- APRP activities in information
- Impact of APRP:
 - Criteria of analysis
 - Analysis of 6 key programs
 - Overall impact
- Gaps remaining
- Recommendations

The Role of Data and Information in a Free Market Economy

- In free-market economy, decision-makers are millions of farmers, traders, and processors
- Good information has to be created and processed, and it must reach millions of “new” decision-makers
- If information is of high quality, timely, in right format, and is disseminated regularly, millions of individual decisions will be economically efficient

APRP Interventions in Information Creation

- Key Efforts:
- Yield forecasting
- Planting intentions and projected water demand
- Farm income data
- Market information
- Cotton market information
- Methods of estimating crop area

APRP Interventions in Information Creation

- Other Efforts:
- Assessments of data quality and availability
- Gender-disaggregated data
- Data analysis by MALR (APAU, etc.)
- Baseline studies and policy analysis

Assessment Criteria

- Technical
- User Friendliness
- Institutional capacity (Sustainability)

Farm Income Data

- Highest quality
- Good coverage (15 governorates)
- Institutional capacity being built. Excellent TA by RDI. Excellent collaboration of EAS, Agricultural Affairs, Sampling.
- Lack extension package for farmers
- Wider distribution of the information needed

Yield Forecasting

- Much greater accuracy; state-of-the-art methods
- Excellent cooperation between MVE, EAS, Sampling
- Forecasts: new and useful
- Three crops covered: cotton, wheat, citrus
- But, distribution of results very limited
- Institutional capacity weak for Dissemination

Area Estimates (Planting Intentions) for Forecasting Water Demand

- Very high quality data
- Analysis is high-tech
- Distribution of results timely
- 6 governorates, expanding to cover all governorate
- Collaboration between MALR and MWRI essential and excellent
- Budgetary and technical support for MALR extension agents may not be adequate

Market News and Extension Materials in Economics

- Fruits and vegetables are covered, but none of the major field crops
- Good distribution of local market information for F&V(non-APRP)
- Good international data distributed for cotton & rice
- Most efforts Lack data on local markets
- No use of income, cost data in farm extension program

Cotton Market Information

- Excellent technical information, increased coverage (web sites/CATGO/RDI)
- Excellent weekly international data (ALCOTEXA, web sites, RDI)
- Distribution of cotton market data too limited
- No domestic price information
- No analysis of link between international markets and domestic markets
- Future role of MALR/EAS in domestic cotton market news?

Crop Area Estimation

- Outline:
 - Summer Crops
 - Winter Crops
 - Crop Area Forecasting

Overall Impact of APRP on the Economy through Improved Information

- Better, more informed policy & marketing decisions (wheat, cotton and citrus forecasts, farm income)
- Better allocation of water resources (area estimates, forecasting for water demand)
- Marketing and pricing efficiency, accurately reflecting world supply and demand (market news) (cotton, F&V)

Gaps in Information System

- Incomplete geographic coverage and number of crops covered for forecasting yields, income and cost estimates, and water demand projections
- Just beginning information program for New Lands
- MALR, CATGO and ALCOTEXA do not report domestic market information in weekly and quarterly reports
- Except for fruits and vegetables (MIP), no market news service for farmers and small traders
- Extension materials lack economic information
- Lack sound analysis of data at national level
- Institutional gaps include:
 - Weak link between analysis and market information
 - Limited technical and budgetary capacity in extension services

Recommendations

- Create more information from greatly improved data sets now available
- Fill in crop and geographical gaps in data as fast as possible
- Fill in gap in market news and economic information for farmers
- Area Estimates
 - Expand to cover all basic crops and regions
 - Improve the area forecasting models
- Assess the technical and institutional capacity building actions required to build a farmer-friendly market information system
- Build the farmer-friendly, market information system and add an economic component to extension materials

THE IMPACT OF APRP AT THE FARM LEVEL
DR. MORSY ALI FAWZY, DR. MAMADOU SIDIBE
AND DR. OSMAN SALAMA

Outline of the Presentation

- Objectives
- Methodology
- Implementation work plan
- Main Findings & results:
 - Cropping pattern
 - Farm inputs market
 - Policy reform awareness & information
 - Output marketing
 - Farmer welfare

Main Objectives

- Goal: Examine impact of key APRP reforms on welfare of farmers and performance of agricultural system
- Specific Objectives:
 - Determine to what extent policy changes have influenced activities at the farm level
 - Identify problems and obstacles that have constrained policy changes

Methodology

- Before and after approach
- The team followed three data collection procedures:
 - Baseline producer survey (MVE, MALR, GTZ, IFPRI)
 - Endline producer survey (MVE)
 - Secondary databases

Implementation Workplan

- Scientific approach
 - Sampling procedure and sample size
 - Questionnaire design
 - Selection of researchers & training
 - Pre-test of questionnaires
 - Timetable for data collection and analysis (October-June)

Sampling Procedure & Sample Size

- 10 Governorates
 - Lower Egypt (6)
 - Middle Egypt (2)
 - Upper Egypt (2)
- 31 Districts
 - 3-4 districts from each governorate

- Farm Selection: 744 farms
 - Pre-sampling unit is farm
 - 12 farms from each village

Questionnaire Design

- Two questionnaires
 - Main
 - ◆ Quantitative variables
 - ★ Inputs & outputs (technical coefficients)
 - ◆ Qualitative
 - ★ Awareness, attitudes of farmers

Complementary Questionnaires

- Input traders
- Cotton traders
- Cereal traders
- Cooperatives
- Extension agents
- Village bank
- Mills (wheat, maize, rice)
- Cotton Gins
- Farmer leaders

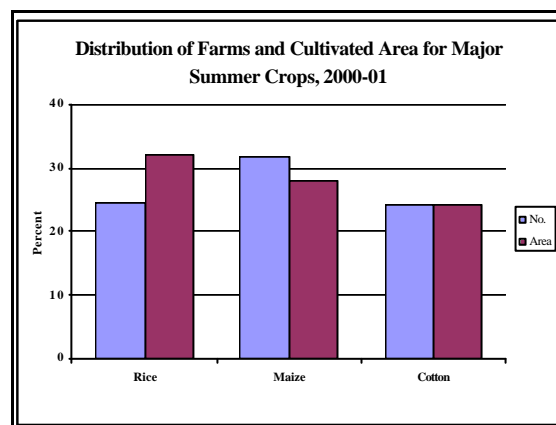
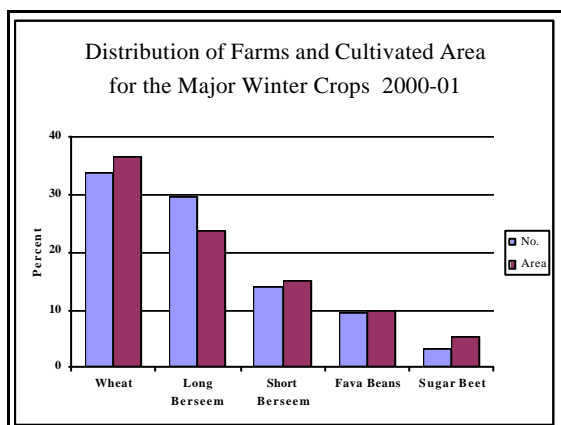
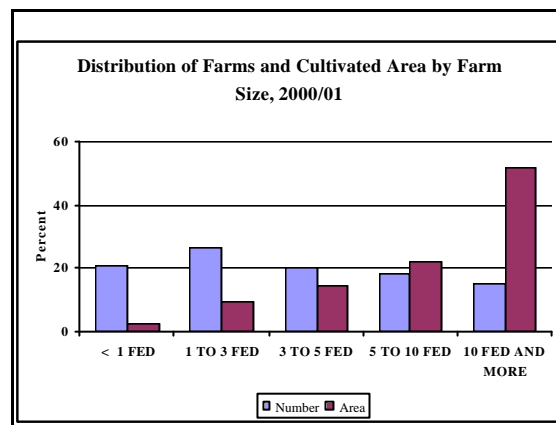
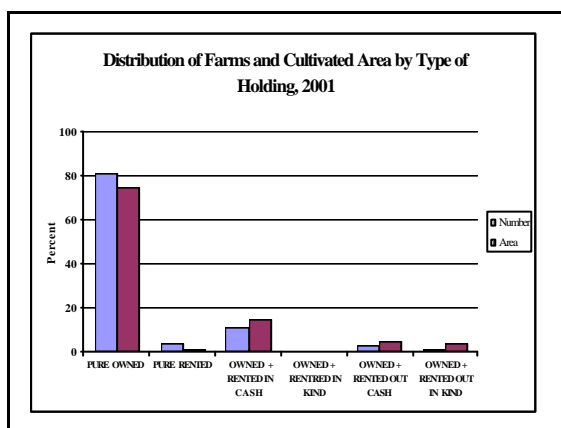
Issues and Questions

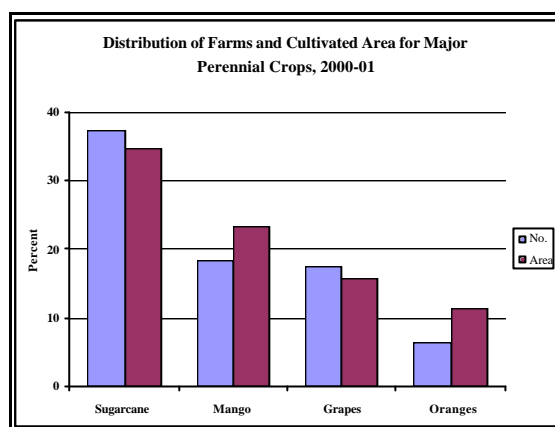
- Cropping Pattern
 - Are farmers free in choosing cropping pattern?
 - When did they start practicing their freedom?
 - Who determines the cropping pattern?
 - What factors are taken into consideration?
- Farm Inputs: (Seed, fertilizer, pesticides)
 - What is extent of competition in farm input markets?
 - Is marketing system for farm inputs now more efficient?
 - Are the farmers free to obtain farm inputs from any source?
 - Do farmers have more choice now?
 - What is best source of farm inputs from farmers' point of view? Why?
- Labor Force
 - What is composition of labor used at farm level?
 - What is share of labor costs in total cost of production?
- Output Marketing
 - Are farmers free to sell their products to whomever they want?
 - What is the extent of competitiveness of output markets?
 - What is preferable marketing channel for different crops from farmers
 - What is preferable marketing channel for different crops from farmers' point of view?
 - What is share of private sector in output markets?
- Awareness & information

- ▶ What are sources of information for determining cropping pattern?
- ▶ Have you heard about short-season varieties of rice and delinted cotton seed
- ▶ Do you know announced floor prices of cotton, wheat, rice?
- ▶ When did you hear about it?
- ▶ Have you heard about the improved irrigation system in sugar cane?
- Producer Welfare
 - ▶ What happened at farm level?
 - ▶ Are farmers better off now than before APRP?

Some Sample Characteristics, MVE Survey, 2001

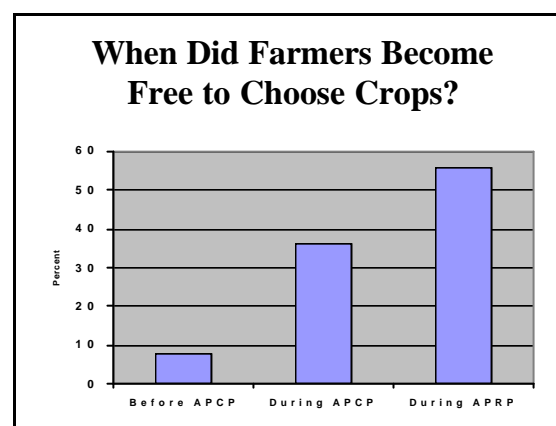
- Distribution of farms by:
 - ▶ Type of holding
 - ▶ Farm Size
- Cropping pattern





Results, Part 1

- Cropping patterns
- Input markets
- Policy reform awareness

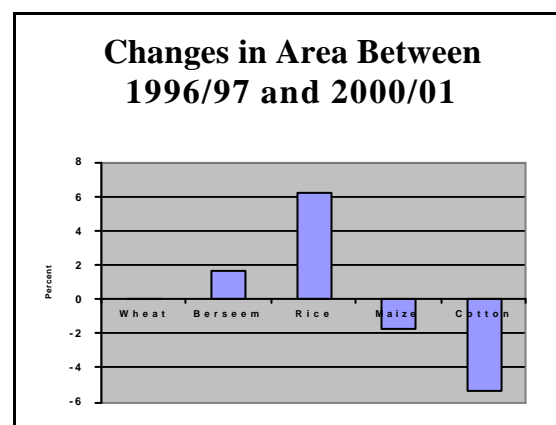


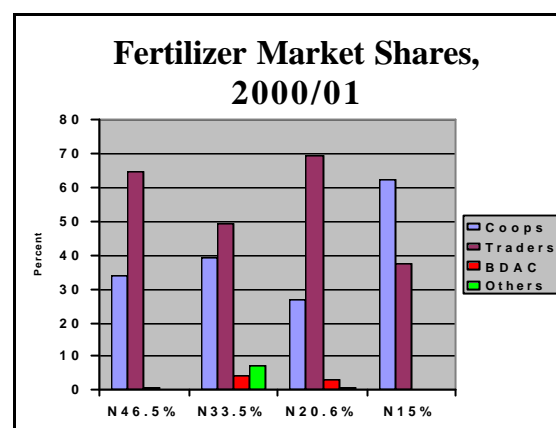
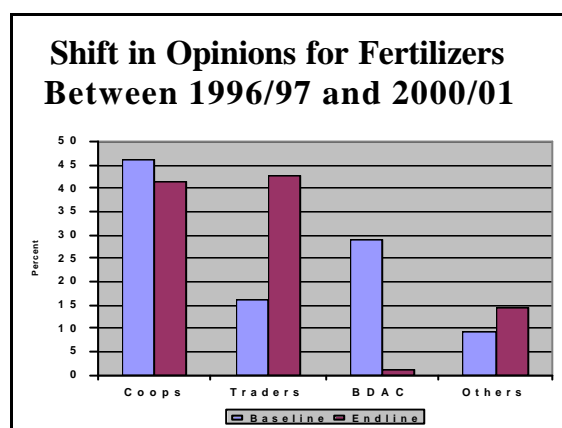
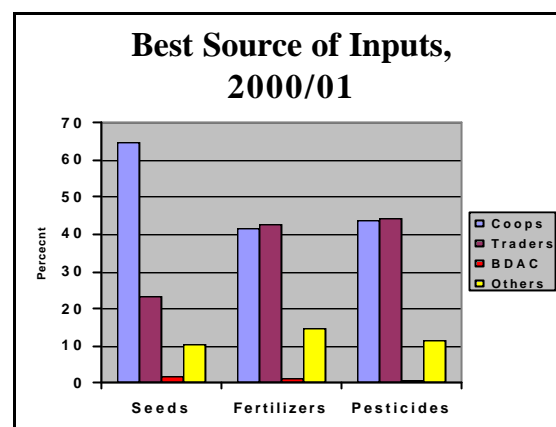
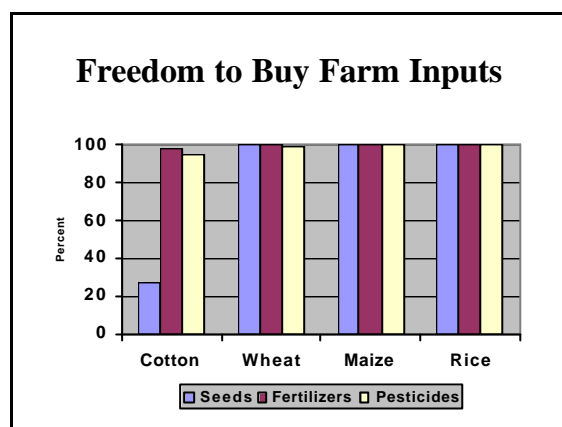
Who Do Farmers Consult?

- Farmers: 41%
- Neighbors: 31%
- Extension Ag. 9%
- Family: 4%
- Others: 15%

Did Farmers Change Their Cropping Patterns?

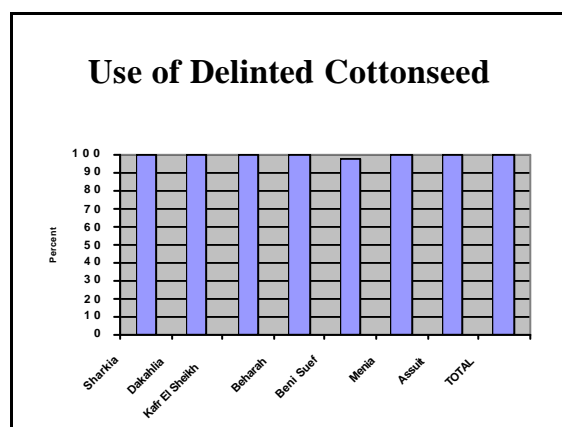
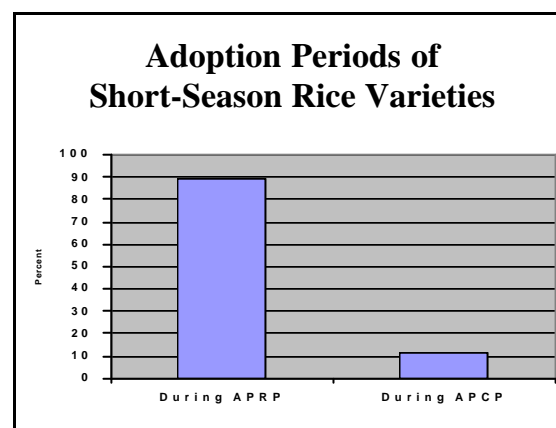
- 53% “Yes” because of crop profitability
- 43% “No” because of the crop rotations

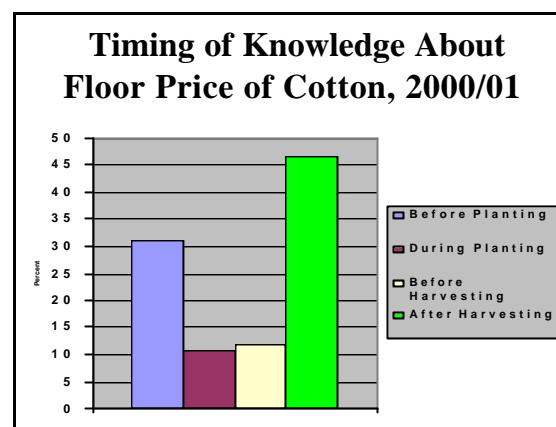
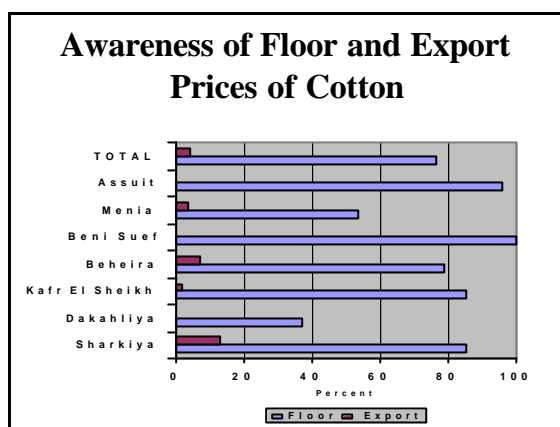




Farmers' Awareness of Short-Season Rice Varieties

- All rice-growing governorates: 100%
- Ismaileya: 50% of the respondents





Qena: Awareness of Improved Sugarcane Irrigation Systems

- Aware: 93%
- Not aware: 7%

Benefit from Knowing Export Price of Cotton

- 98% of the respondents said “No”, they would not benefit
- 2% said “Yes”, they benefit from knowing the export price

Results, Part 2

- Issues and Questions
 - ▶ Extent of commercialization
 - ▶ Output markets
 - ▶ Farm income

Commodities

- ▶ Cotton
- ▶ Rice
- ▶ Wheat
- ▶ Maize
- ▶ Horticulture

Share of Production Marketed

	1997	2001	%
Rice	53%	66%	13
Wheat	59%	81%	22
Maize	62%	71%	9
Cotton	97%	97%	0
Horticulture	90%	99%	9

Are Producers Free to Market Their Output?

- Cotton: 40% of producers are free to market their products, compared to 2% in the baseline producer survey
- Wheat, rice and maize: all producers have freedom to market their products

When Did Marketing Freedom Start ?

	Before APCP	Under APCP	Under APRP
Cotton	0	16%	84%
Wheat	2%	57%	41%
Rice	2%	63%	35%
Maize	5%	68%	27%

What Are Best Marketing Channels?

	PBDAC Coops		Private Ring	Local Traders
Cotton	47%	30%	13%	4%
Wheat	11%	3%		74%
Rice	0.5%	2%		91%
Maize	1%	2%		90%

Criteria for Preferring Marketing Channel

	Cotton	Wheat	Rice	Maize
Confidence in getting the price	1	-	-	-
Offer best price	2	2	3	2
Pay cash on spot	3	1	1	1
Provide inputs on credit	-	3	2	3
Buy at farm gate	-	4	4	

What Is Competition Structure of Output Markets?

Number of Traders **Inside** Village

	0	1-3	4-6	> 6
Cotton	95%	3%	2%	-
Rice	-	41%	46%	13%
Wheat	-	40%	36%	24%
Maize	-	48%	30%	22%

What Is Competition Structure of Output Markets?

Number of Traders **Outside** Village

	0	1-3	4-6	> 6
Cotton	91%	8%	1%	-
Rice	14%	49%	24%	13%
Wheat	21%	51%	18%	10%
Maize	34%	42%	16%	8%

What Are Changes in Sales to Different Marketing Channels?

- 54% of cotton producers thought that there was increase in quantities sold to PBDAC and coops
- 95% of wheat, rice and maize producers believe that quantities sold to private traders increased

Are Producers Free to Bargain Output Price with Buyers?

- More than 90% of cotton, wheat and maize producers say they can not bargain at PBDAC, coop centers, private rings and factory agents. 100% of rice producers are freedom to bargain with these buyers.
- All producers of wheat, rice and maize and 54% of cotton producers bargain prices with local traders.

When Did Bargaining Start ?

	Before APCP	Under APCP	Under APRP
Cotton	----	7%	93%
Wheat	3%	58%	39%
Rice	3%	62%	35%
Maize	6%	68%	26%

How Did Farmers Receive Payment?

- Credit: Cotton was sold on credit to PBDAC (80%) and coop centers (98%).
- Cash: Farmers received cash for wheat, rice and maize from different marketing channels

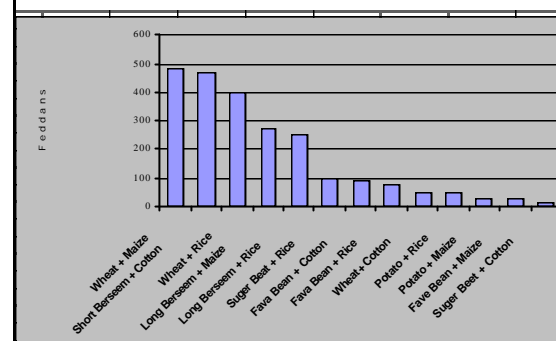
Farm Income

- Are producers better off now than before APRP?
- Farm income includes:
 - Plant crops
 - Livestock activities
 - Change of inventory

Gross Margins, Main Crops

(LE/ feddan)				
	1997	2001	% Increase (1)	% Increase (2)
Cotton	1212	2173	79	66
Rice	1094	1266	16	7
Wheat	1225	1289	5	-3
Maize	560	814	45	34
Horticulture	2076	2599	25	16

Major Crop Rotations



Gross Margins, Main Rotations

(LE/ feddan)				
	1997	2001	% Increase (1)	% Increase (2)
Wheat + Maize	1785	2103	18	5
Wheat + Rice	2319	2555	10	2
Long Berseem + Maize	1712	2452	43	32
Long Berseem + Rice	2246	2904	29	19
Short Berseem + Cotton	1716	2651	54	43

SMEs AND RURAL EMPLOYMENT CREATION

TAMER EL-MEEHY AND DR. LAMIA BULBUL

Objectives

- Investigate the relationship between agricultural growth and the rural non-farm sector
- The main hypothesis is that the main impact of agricultural growth on employment is realized through increased demand on SME and HBE products and services.

Research Work

- Field research (completed) on:
 - SMEs (1-15 workers establishments).
 - HBEs (home-based or non-establishments).
 - Households (to determine where they purchase their products and services from).
- Literature Review (on-going).
- Analysis of data & findings (on-going).

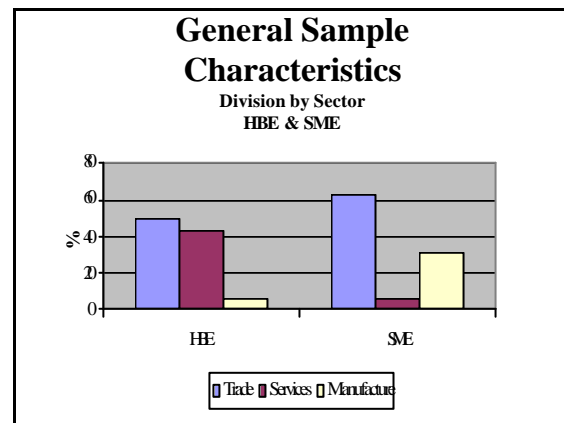
Outline

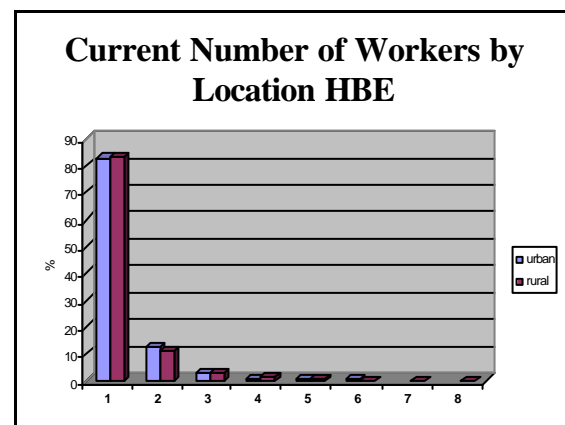
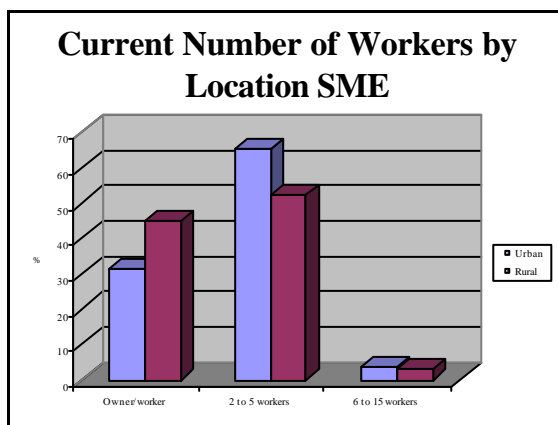
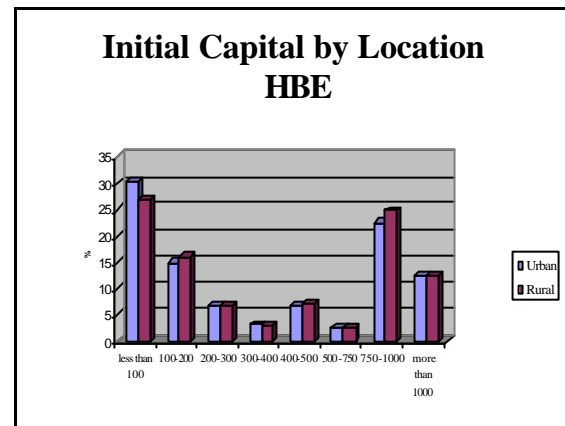
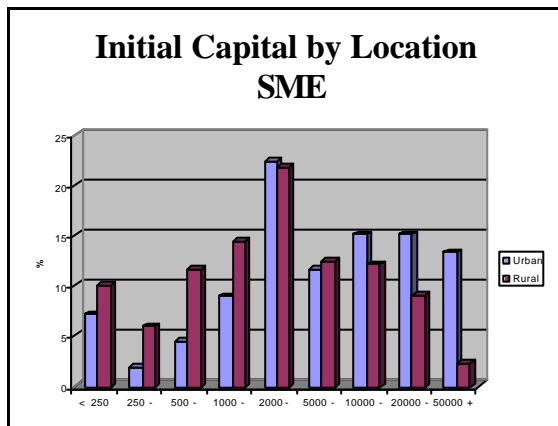
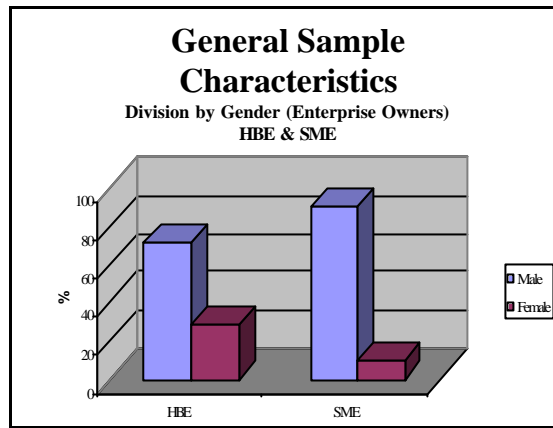
- General Characteristics
 - Distribution by Sector - Gender of Owner – Initial Capital - Number of Workers.
- Growth
 - Capitalization - Employment Generation - Response to Increase in Demand.
- Self-Containment
 - Origin of: Inputs – Workers – Customers – Proportion of Farmer Customers – Sales due to Farmers.
- Concluding Remarks

Part I: General Characteristics

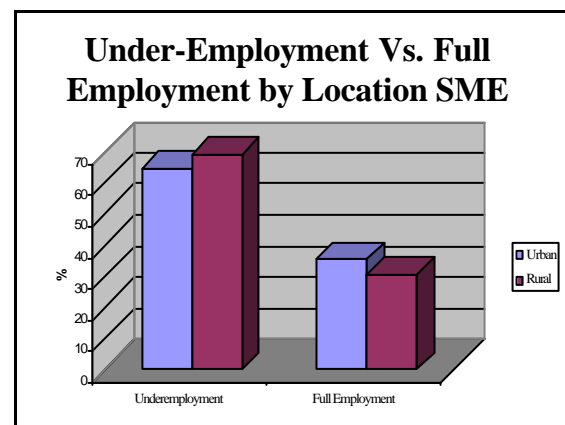
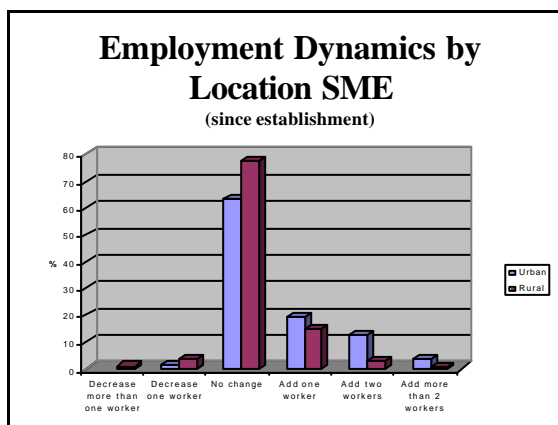
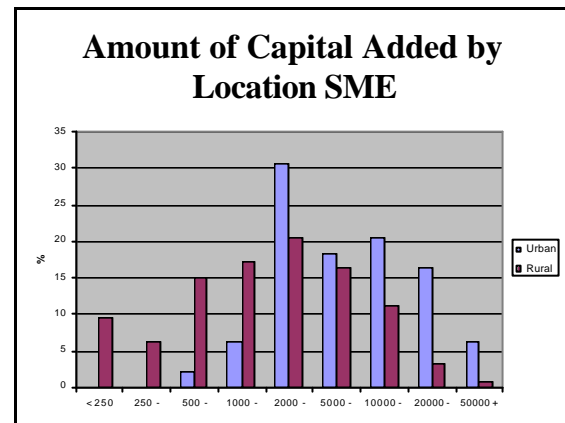
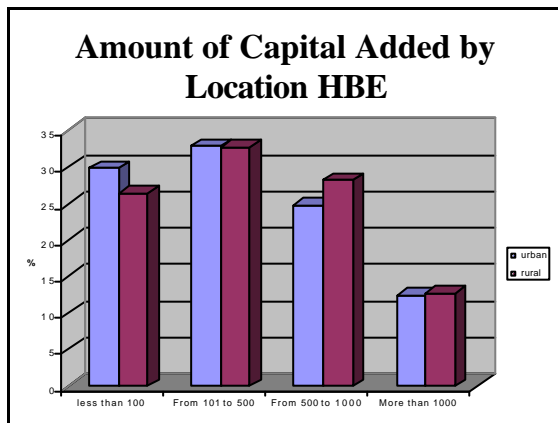
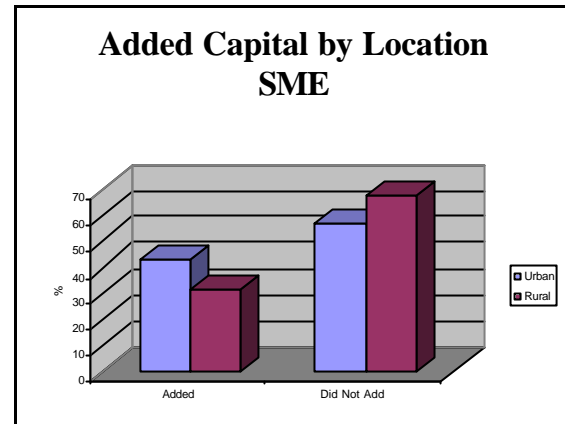
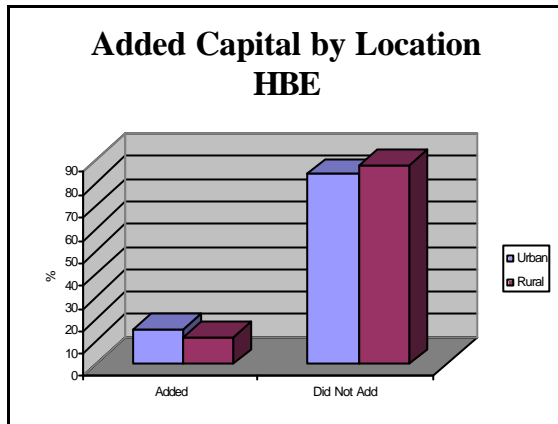
Sampling

- Total sample size is 1,254 enterprises (649 SMEs & 605 HBEs), divided between
- rural (76%)& urban (24%).
- Stratified three-stage systematic random sampling.
- 3 governorates (Assiut, Beheira & Sharkiya) were chosen from three clusters.
- Clusters were based on several criteria including poverty level, unemployment, share of agricultural workers in total labor force, representation of upper & lower Egypt, population density...etc.
- Two markaz were selected from each governorate, and two local units from each markaz.

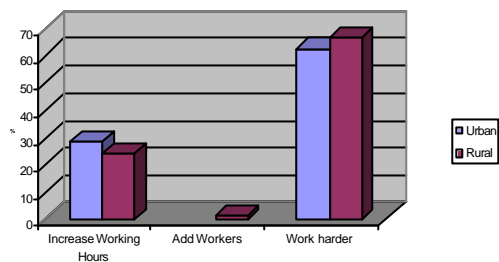




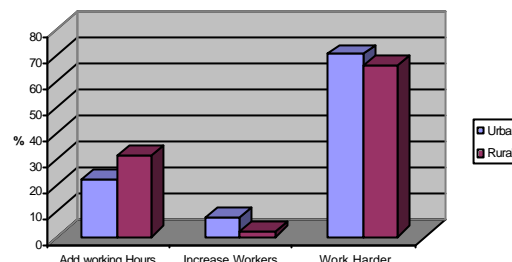
Part II: Growth



Response to Increase in Demand by Location HBE

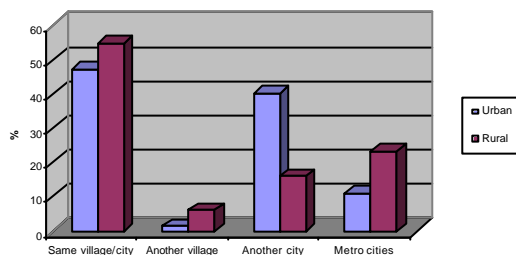


Response to Increase in Demand by Location SME

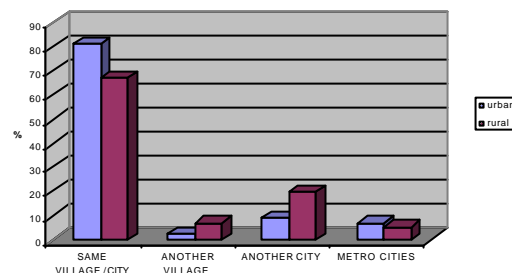


Part III: Self-Containment

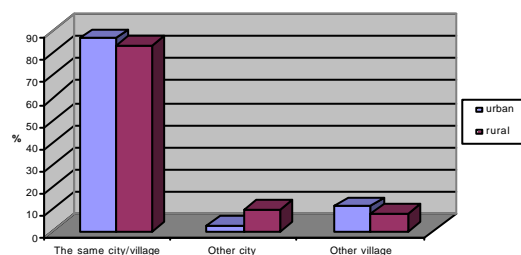
Origin of Input by Location SME



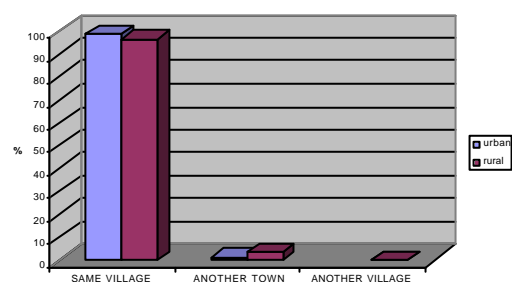
Origin of Input by Location HBE



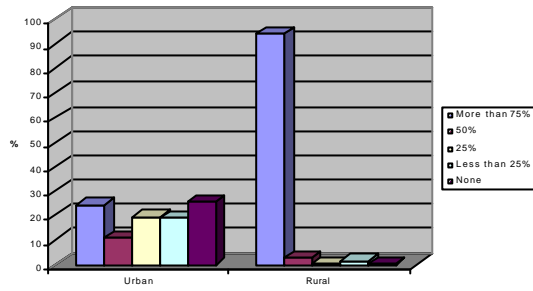
Origin of Workers by Location SME



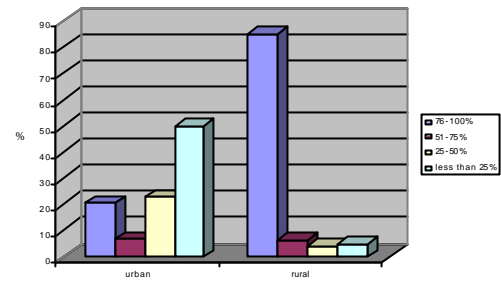
Origin of Workers by Location HBE



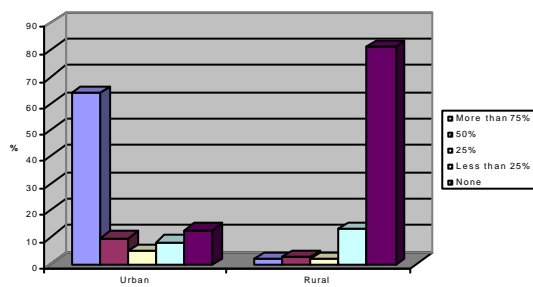
**Origin of Customers from Village
by Location SME**



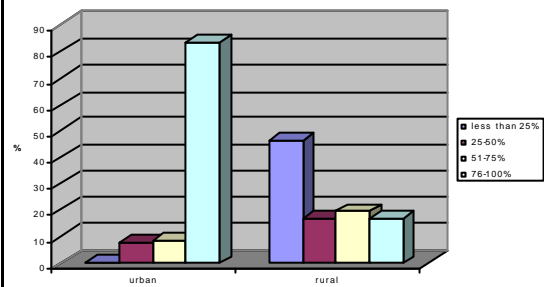
**Origin of Customers from Village
by Location HBE**



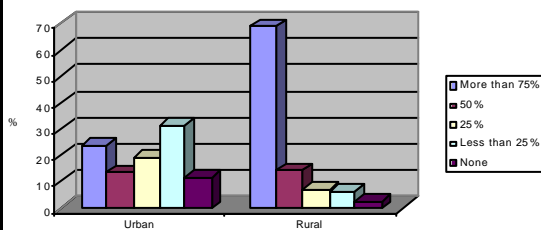
**Origin of Customers from City by
Location SME**



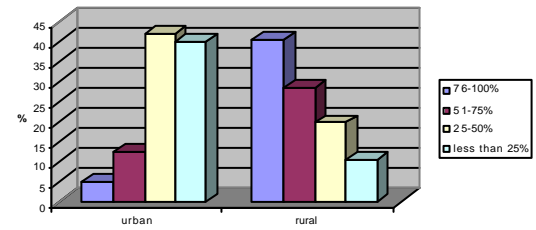
**Origin of Customers from City by
Location HBE**

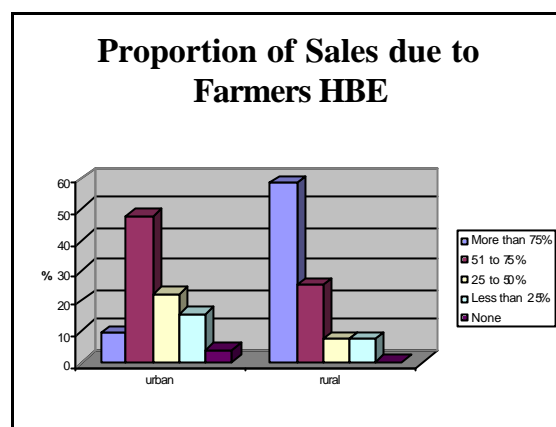
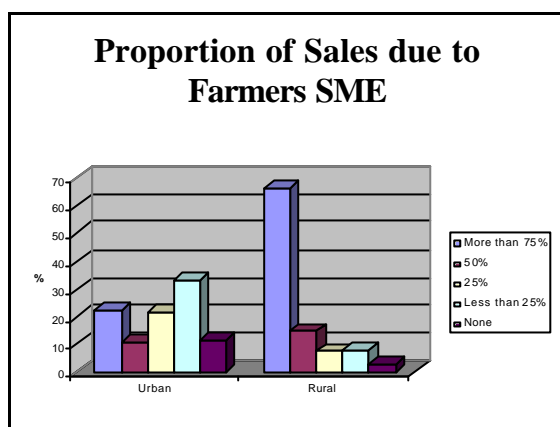


**Proportion of Farmer Customers
SME**



**Proportion of Farmer Customers
HBE**





Self-Containment				
	Labor Mostly Same Village/City	Inputs Mostly Same Village/City	Farmer Customers >75%	Sales to Farmers >75%
Rural HBEs	96%	68%	40%	59%
Rural SMEs	83%	55%	69%	66%
Urban HBEs	98%	81%	5%	48%
Urban SMEs	86%	47%	24%	22%

Part IV: Concluding Remarks

SMEs & Employment (Literature Review)

- 75% of SME employment is generated upon establishment.
- Employment growth accounts for 25% of SME employment.
- Employment generation in this sector occurs mainly through multiplication in numbers rather than changes in firm size.
- Just like SMEs and HBEs have high birth rates, they also have high death rates (churning).

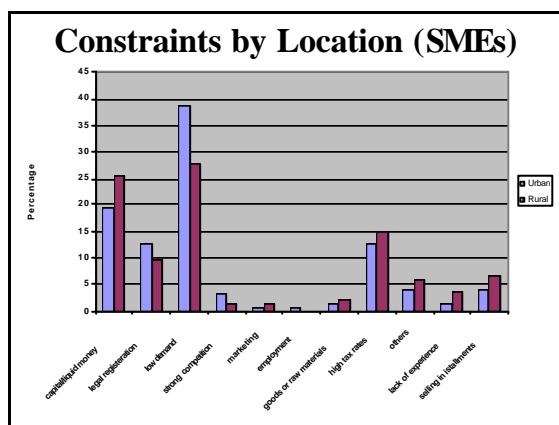
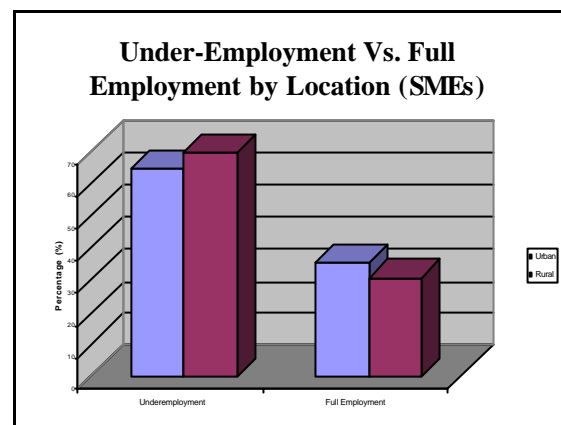
SMEs & Employment (Findings)

- Urban SMEs are on average larger than rural SMEs.
- Average number of workers in SMEs is 2.09 (2.37/urban SME & 2.01/rural SME).
- One worker enterprises accounted for 46% of rural SMEs and 31.6% of urban ones, compared to 83% in both urban and rural HBEs.
- Average number of workers per enterprise is 1.2 in both urban & rural HBEs.

Capital/Worker Ratio

- SMEs: LE 7,072.5/worker
- Urban SMEs: LE 11,650/worker
- Rural SMEs: LE 5,241/worker
- HBEs: LE 1,045/worker
- Urban HBEs: LE 797/worker
- Rural HBEs: LE 1,164/worker

Location & SME Employment Generation			
	Added	Decreased	No Change
All SMEs	23%	3%	73%
Rural SMEs	18%	4%	78%
Urban SMEs	35.4%	1.2%	63.4%



	Labor Mostly Same Village/City	Inputs Mostly Same Village/City	Farmer Customers >75%	Sales to Farmers >75%
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THE IMPACT OF AGRICULTURAL GROWTH ON SMEs AND EMPLOYMENT

DR. JOHN W. MELLOR

Agenda

- Explain two sets of facts
 - International
 - Egyptian
- Explain key assumptions for a model of employment growth
- Measure the impact of agricultural growth on employment

Key Facts

- Agricultural growth explains poverty reduction/employment increase (international cross-section data)
 - Growth reduces poverty
 - There is much variance in relationship
 - 85 percent of poverty reduction is due to agricultural growth
 - There is a lag in the impact
 - The impact does not occur with absentee landowners
- Small firms dominate employment (Egyptian data)
 - 62 percent of total employment is in small firms and self-employed
 - 2/3 of those are rural (42 percent of all employment)
 - All demand for rural nonfarm sector is domestic (not exportable)
 - 23 percent of labor force in agriculture, 15 percent in urban industry (tradables)

Modeling Employment Growth

- Purpose
 - Highly simplified models illuminate key relationships
 - Such models ensure internal consistency in complex situations
 - Conclusions drawn must not be caused by the simplifications
- The model - three sectors
 - Agriculture - can export
 - Urban tradables - can export
 - Non-tradables - cannot export, relies on domestic market

GDP, Employment, and Factor Shares, by Sector, Egypt, 1998

Sector	GDP Percent	Employment Percent	Labor Share	Capital Share	Land Share
Agricultural	17	23	55	10	35
Urban tradable	57	15	10	90	0
Non-tradable	26	62*	100	0	0

Sources: CAPMAS 1998 Labor Force Survey; National Income Accounts; World Bank

*2/3 rural

GDP, Employment, and Factor Shares, by Sector, Egypt, 1998

- Agriculture: land is important and fixed, so technological change is essential to growth
- Urban tradable: mostly capital, so capital increase is essential to growth
- Non-tradable: cannot export so increased domestic income essential to growth

Consumption Patterns Differ: Key to Employment Impact

- Laborers and farmers spend heavily on non-tradables
- Farmers income from land spent the same as that from labor
- Thus, a high proportion of demand for non-tradables in rural areas driven by rising farm incomes
- Owners of capital spend entirely on tradables
- If land income goes to absentee owners, the results are different

Employment Impact of Agriculture: Three Scenarios

- Scenario I: Balanced fast growth
 - Assumptions
 - ◆ 1% rate of increase in cultivated area
 - ◆ 5% rate of technological change in agriculture
 - ◆ 8% rate of increase in capital stock
 - ◆ 2% rate of increase in technological change in urban tradable
 - ◆ 2.8% rate of increase of the labor force
- Scenario I: Balanced fast growth
 - Results
 - ◆ Income of the labor class doubles in 12 years
 - ◆ GDP grows at 7.5%
 - ◆ Agriculture grows at 5.6%
 - ◆ Urban tradables grows at 9.1%
 - ◆ These are fast growth rates - frictionless economy (e.g. perfect policy)
- Scenario II
 - Assumptions: No technological change in agriculture, all else the same
 - Results
 - ◆ Agricultural growth becomes negative
 - ◆ Wage Rate/Employment grows at 0.4% doubles labor class income in 180 years!
 - ◆ GDP growth only 12% slower than with fast growth agriculture
- Scenario III
 - Assumptions: Reduce capital growth rate to the same as labor force growth rate
 - Results
 - ◆ Urban tradable growth rate drops by 58%
 - ◆ GDP growth rate drops by over 1/3rd
 - ◆ Wage rate/Employment growth rate drops only 15%

Conclusions

- What drives GDP fastest is not same as what drives employment/wage rate fastest
- Agriculture drives poverty reduction through its massive effect on rural non-farm sector (non-tradable)
- Agriculture grows through
 - Technological change, and
 - Policies that remove frictions

The Issues

- How to accelerate technological change (production, marketing, and product development)
- How to remove frictions, especially for small farmers - negative constraints, knowledge, capital markets

The Sequence

- ◆ Policy and technology
 - ◆ Farm production
 - ◆ Net farm income
 - ◆ Demand for rural non-farm products (non-tradables)
 - ➡ Employment
 - ◆ Income of the laboring class

SYNOPSIS OF PRESENTATIONS AND DISCUSSIONS

DAY ONE - June 2, 2002

Introduction to APRP

The presentations by **Dr. Hussein Soliman**, Head, Livestock Sector, **MALR** and APRP Program Director, and **Dr. Mohammed Omran**, **USAID**'s APRP project officer, during the first morning introduced APRP, placed it in a longer-run policy reform context (begun under APCP), and outlined the structure of the policy reform program, its component units, and their tasks. **Dr. Adel Mostafa** of the **MVE** Unit described in detail APRP's five tranches of policy benchmarks, classifying them in meaningful groupings.

Impact Assessment Methods

Dr. Gary Ender, **MVE** Chief of Party, provided a concise history and overview of **MVE**'s program of economic impact assessment, differentiating it from standard project (monitoring and) evaluation. He pointed out that a combination of approaches to impact assessment were used:

- formal sample surveys (IFRPI's national integrated household survey, **MVE** producer surveys, CSPP cotton producer surveys, **MVE** surveys of cotton traders, rice traders and rice millers) and statistical analysis of survey data;
- structured informal interviews of key informants, such as commodity traders, public and private processors and traders, exporters, **GOE** and holding company officials, representatives of industry/trade associations, and others;
- assessing the quality and reliability of agricultural sector data, particularly production data;
- use of available secondary data, after reviewing it and making judgements about its reliability;
- subsector analysis;
- comparison of the before and after program cases.

This was followed by a presentation about the subsector approach, its underlying structure, conduct, and performance paradigm, and how the approach and the paradigm were applied to impact assessment (of four key subsectors) in Egypt. This is discussed in more depth in the section about subsector studies.

Geographic Indicators

The presentation by **Dr. Glenn Rogers of USAID** stimulated a lot of commentary, particularly about the types of indicators chosen to show the longer-run socioeconomic impact of policy reform and their relationship to APRP. Glenn responded that the indicators were indeed general but important in showing how rural people were doing in different parts of Egypt. The fact that most indicators showed positive gains was at least indirect evidence that APRP and other policy programs had a positive impact on the rural quality of life.

The disturbing confluence of increased investment in female education in Upper Egypt with decreased wealth was a surprising finding, suggesting that **UE** households may face some difficult choices. The

presenter noted that the web of causality is complex, and that we should not read too much into any one set of observations. For example in the Upper Egypt, one might conclude that rural families are selling off assets to send their girls to school. We have to be careful in drawing conclusions like this; they may be erroneous.

Impact of Water Policy Reforms

Andrew Tczap, Chief of Party of the **EPIQ** team in MWRI, presented a summary of key achievements in water policy and future directions. The speaker presented a policy vision for Egypt that he noted did not necessarily represent WPU, MWRI or EPIQ thinking. He suggested that WUAs should be established in non-IIP areas ~~down~~ up to the branch canal level. Irrigation management should be transferred to the WUAs, which would charge and recover O & M costs. MWRI would allocate tradable water allocations among WUAs, which would increase water use efficiency and relieve MWRI of a large financial burden.

The benchmark and implementation activities surrounding matching of supply and demand for irrigation water established a process for sharing information between MALR and MWRI about farmers' planting intentions and actual plantings and water availability. Pilot activities have been successfully implemented in 38 water management districts, where water demand (estimated requirements, based on actual plantings) is calculated by district, using a standardized computer program. Three million feddans are currently covered at 163 total sites.

One discussant observed that the issue of privatizing water management is a complicated one, since agricultural holdings are very small and would result in burdening farmers with significant additional costs. The presenter responded that the directors of the pilot water management units reported that their counterparts were enthusiastic about the prospects of managing their own water and said that they had been dreaming of "controlling their own destinies." Farmers believe they can manage their own water more efficiently than the Government. They can transfer and trade their water quotas with other growers, including large farmers.

Someone else asked how far Egypt can go in water privatization. The presenter responded that the national water plan is based on the decision rule that municipal water needs are the priority. Within this primary constraint, how far the GOE can go in privatization depends on other national needs. He personally feels that privatization of water management should be pushed.

Another discussant asked if the project has information about water quality, particularly in areas where horticultural crops are planted. The speaker noted that the EPIQ project has some information about specific areas.

Commodity Subsectors: Approach and Assessments

Using Subsector Analysis in Impact Assessment. This presentation by **Dr. John Holtzman** of the MVE Unit described how subsector analysis, using an underlying structure, conduct, performance paradigm, was used to assess the impact of APRP policy reform on various commodity subsystems in Egypt, which were the subject of many benchmarks. The presentation defined commodity subsectors, illustrated subsector maps, and discussed different levels of policy analysis.

The presentation laid out the analytical framework underlying subsector analysis, the structure, conduct performance paradigm, and provided examples of how it could be applied to commodity subsectors in Egypt. Dr. Holtzman contrasted conventional economic impact assessment with subsector analysis, emphasizing that many APRP reforms were focused on particular commodity subsystems rather than sectoral (cutting across the agricultural sector) in nature.

One discussant asked what is Egypt's capacity to do subsector studies, which have large data requirements. The presenter acknowledged that doing a subsector study requires access to many sources of data, some of which are not publicly available. Over time this should become less of a problem.

Another observer pointed out that participatory data collection techniques were not used to obtain information from farmers. The speaker responded that farmers were asked about their operations and crop disposal through formal surveys by IFPRI, MVE and CSPP.

A frequent university consultant to APRP pointed out that the MVE Impact Assessment Strategy design team had proposed doing total factor productivity analysis, using farm level data. The speaker misunderstood the question, thinking that this observation was about modeling techniques in general. He responded that the MVE Impact Assessment Strategy design team considered a range of modeling techniques, including multi-market models, CGE models, and a mathematical programming model. The latter, developed initially by the World Bank and then expanded by IFPRI, was the subject of careful review by an APRP team of qualified staff well versed in linear programming. An academic modeler, on the EPIQ team in the Water Policy Unit of MWRI, was never able to get the model to generate credible results that would convince any policy-maker of its validity or utility. After a couple years of review, further attempts to adapt and validate the model were dropped.

The speaker also pointed out that the MVE Unit first assessed data quality issues in agriculture and found serious problems with secondary data on agricultural production. MVE made a strategic choice to invest more resources in improving data quality. Other data on marketing variables (prices) are not easily accessible or reliable or available in long-enough time series to do certain types of modeling well.

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DAY TWO - June 3, 2002

Cotton/Textile Subsector. This presentation by **Drs. Adel Mostafa and John Holtzman** was one of the better attended ones at the Conference, with quite a few GOE and industry cotton specialists in the audience. The presentation raised some sensitive issues, which generated some heated commentary.

The presentation first reviewed the first steps in liberalization of the cotton subsector under APRP and the situation in 1996/97, at the start of APRP. It then covered:

- Cotton/textile subsector benchmarks and their classification
- APRP implementation activities
- APRP success stories
- General lessons of cotton policy reform
- Threats to liberalization during recent marketing seasons
- How the cotton subsector might evolve in five years without major policy change
- Summaries of main APRP accomplishments and recommendations.

The chairman of a public trading company stated that the main problem in the cotton subsector is not privatization; rather, subsector problems stem from “disturbances” in the cotton economy. There are public sector companies capable of performing well, but they are hamstrung under current GOE and HC-SWRMC restrictions. The presentation took too much of a microeconomic perspective and focused too much on details, albeit some important ones. What is needed is a broader strategic vision and the political will to implement it. The cotton subsector is not functioning well and what is needed is a comprehensive program and an integrated policy to encourage exports and forecast the needs of the local spinning mills.

A leading private exporter agreed that the presentation touched on too many subjects and did not emphasize that the whole environment (GOE, trade, industry) affected current subsector performance. One decidedly negative factor is that the spinning industry has collapsed. Initially and through 1999/2000, private traders concentrated on supplying domestic spinners and did so profitably. They did not really know how to export initially, so the local market was preferred. A badly performing public spinning industry has dragged the whole subsector down and requires a “solution”. This discussant also noted that policies can cut both ways, harming or helping both the public and private sectors.

He begged to differ with MVE’s observation that ALCOTEXA set opening prices in 2001/02 too high. He said that ALCOTEXA set prices at reasonable levels in relationship to pima prices. Once seed cotton prices have been set, export prices are set in relation to domestic prices in that they cannot fall below a certain level. If export prices are set at levels below domestic price levels, traders will lose money when they export. As a general observation, this is true. In many years, export prices cannot be discounted by more than 2-3 cents/lb. because they are linked to domestic seed cotton prices, which have been set rather high. The discussant did not point out, however, that ALCOTEXA failed to adjust these prices downward in 2001/02 once the Egyptian pound was devalued, which enabled private exporters to start deeply discounting sales of Egyptian lint (while public companies could not).

This same private exporter also emphasized that the rules applied to cotton exports were the same for the public and private sectors. He also stated that both public and private sector members of the Management Committee supported the opening price level announced.

He also argued that international demand for ELS and LS cotton was not declining and that there is scope for Egypt to increase its market share in the world lint trade in some markets. The main competitor, U.S. pima, is heavily subsidized. The new U.S farm bill will continue subsidies on most major traded agricultural commodities.

A leading MALR cotton researcher and policy-maker stated that the lint carryover problem in Egypt is in large part due to the failure of the domestic spinning mills, which have not taken delivery on the quantities they had intended to receive during the past few years. He spoke about the need to study local and international demand for each cotton variety. He noted that all the varieties are potentially exportable (a key point of a recent CSPP study by El-Sayed Dahmouch et al., 2002). Giza 86 has been a star performance, while Giza 70's performance has fluctuated (and has been poor in some years following poor Giza 70 harvests). Giza 89 is also an emerging export variety, though it is also spun domestically.

He stated that there was no problem with the varietal map. It is based on the needs of the domestic spinners and the export companies. The key lies in properly defining those needs.

This discussant also alluded to the cotton subsector strategy exercise underway, which he chairs and which is funded in part by CSPP. He sees the long-run requirements for Egyptian lint to be 3.0-3.5 million kentars for domestic utilization and 2.5 mlk for export. Production policy needs to be established on the basis of sound figures. Some buffer stock is normal and desirable.

Last, he concurred with the point that Egypt should import cheaper lint to spin lower-count yarn and not push the development of *hirsutum* varieties. He mentioned that European producers, especially Greece, and the U.S. subsidize exports of short-staple cotton. Given low world prices for short-staple cottons, Egypt should rely on trade to obtain cheaper lint rather than promoting *hirsutum* production at this time.

A PBDAC official defended the Domestic Cotton Marketing Supervisory Committee, saying that four ministers signed the annual Optional Marketing System decree, and that all the stakeholders were given a chance to apply for sales rings. She noted that there are some private sector members on the Supervisory Committee. PBDAC manages cotton sales rings, organizing the cotton trade, and does not own the rings or the cotton.

A leading exporter said that international spinners prefer Egyptian lint to pima, which is harder with harsher texture (as it is machine harvested). Pima is stronger, though. So many fine-count spinners (outside Egypt) will mix Egyptian lint and pima. The Egyptian lint provides softness and better texture. A public exporter stated that he was unaware of blending of Egyptian lint and pima. He thinks that Giza 70 cannot be blended with pima, while Giza 86 can, though not without problems, as pima is creamy in color while Giza 86 is white.

A USAID official asked what should be a future plan of action for USAID in working with the GOE on cotton subsector reform. One of the speakers pointed out that CSPP is working with the GOE to develop a cotton subsector reform strategy. He also reiterated some of the policy recommendations noted earlier.

A member of the RDI Unit of APRP said that the presentation did not go far enough in recommending liberalization measures. Why set indicative export prices at all? Why leave farmers out of determining what the varietal map is? Why have a seed cotton buyer of last resort? Everything should be market driven.

Impact of APRP on the Wheat Subsector. A key point of this presentation by consultants **Roger Poulin and Dr. Abba Abdel-Latif** was that the GOE should have clear objectives when it comes to the wheat subsector. Wheat/maize mixing is one example. The objective of mixing could be to reduce the cost of wheat and maize used or to reduce leakage, which also reduces the total cost. These are “supply-side” options. On the demand side, the GOE might produce an inferior type of bread that only the poor would buy.

The presenters’ argument that there is excess capacity of 72% flour mills and that the GOE should direct some of this excess capacity to the production of 82% flour generated quite a bit of discussion. A public miller noted that if the GOE were to close the 72% flour mills and produce only 82% flour as recommended by the study, wheat milling companies would suffer huge losses and would have to fire a large number of workers. He stated that the private sector should bear the consequence of the excess capacity in the industry. One of the presenters responded that excess capacity is not only the fault of the private sector; the Government is also responsible through its ambiguous and confused policies. The study recommended that the public mills focus on 82% wheat while charging the full milling fee, which would generate enough revenue so that they would not suffer any losses. Private mills are closing down their 82% milling operations, because they could not profit after making the large investment in the new, GOE-mandated technology of cylinder mills.

Another discussant argued that the GOE objective of increasing self-sufficiency through promoting wheat production is opposed to the other GOE objective of encouraging cotton production and export. This is because harvesting of wheat in late April/early May does not allow for timely cotton planting (late March/early April). One of the presenters responded that it is hard to assess the opportunity cost of planting wheat instead of cotton, because there is so much government control in both subsectors. He noted that planting wheat is profitable, since wheat occupies the land for one season and farmers can plant another crop after wheat. The point that late harvesting of wheat either precludes planting of cotton or leads to late planting and low yields is technically correct, however.

Rice Subsector. **Dr. John Holtzman** presented most of the material, with consultant **Dr. Abdel-Rahim Ismail Taha** discussing changes in the rice milling industry. The presentation began by reviewing important changes in the rice marketing system under APCP during the early 1990s. It then covered some findings of the subsector baseline study. After that, the presentation addressed the following:

- Key rice policy issues of APRP
- APRP benchmarks
- APRP successes
- Predicted changes during APRP and the actual response to policy reforms
- Structure, conduct and performance of the rice milling industry
- ESA privatization and post-privatization performance of the mills
- Lessons of rice market liberalization and privatization
- Unfinished policy agenda
- Summary of major impacts of APRP

A leading academic pointed out that under public sector management (in the 1970s and 1980s) that the rice subsector was well coordinated. He implied, though did not state, that the subsector is in current disarray. He also stated that there was a need for better information on both international and domestic markets. Pointing out that Turkey has been importing large volumes of paddy for the last couple of years, using the large installed rice milling capacity (that is far greater than what is needed to process the domestic rice crop), this discussant felt that this was a threat to Egypt's large (also excessive) milling capacity.

Another discussant observed that there was no penalty for farmers planting paddy in areas where it was forbidden. Pricing of water is politically difficult; it is better to discuss water cost recovery. Export subsidies should be considered only in relation to the area of paddy grown. Only if excessively large areas are planted should subsidies be contemplated.

Fertilizer Subsector. During this presentation, consultant **Dr. Abdel-Hamid Youssef Saad** noted that there had been little change in the structure and conduct of the subsector since 1998, when the baseline study was done. The private sector trade was well-established by 1998/99 and continued to distribute much of the fertilizer used by farmers in 2001. PBDAC's market share had declined below 10%, though it appears as if PBDAC will expand that share to approximately 50% in 2002. This was noted to be evidence of at least partial back-sliding by the GOE in liberalizing the fertilizer trade.

One discussant observed that the apparent recommendation of raising fertilizer prices can undermine the competitiveness of Egypt's agricultural sector, because it would affect the prices of exported agricultural commodities as well as the food and fiber prices in the domestic market. The presenter responded that he was not recommending raising prices for fertilizer but rather bringing them in line with international prices. As fertilizer prices are higher in international markets, local fertilizer manufacturers have an incentive to export rather than to supply the domestic market.

Another discussant noted that Abu Qir Fertilizer Company used to export its output for \$90/ton while prices were \$120/ton in the domestic market. Higher prices in the local market could be charged because of the high import duty (30%) on fertilizers. The speaker responded that this situation was temporary and has changed. Currently, prices are higher in international markets than in the local market, especially after the devaluation of the Egyptian pound. The fertilizer endline study recommends reducing or eliminating the import duty on fertilizer. One discussant noted, however, that the import duty should not be eliminated, because it is still needed to protect the national industry from dumping by countries, such as Libya, which enjoy an abundance of natural gas.

One discussant pointed out that although fertilizer is the major cash component of field crop production costs, the increase in crop revenues, due to increasing output prices, was greater than the increase in production costs during the past ten years. Another discussant seemed to be defending PBDAC's plan to expand its market share by stating that the problem with fertilizer distribution is traders. The presenter responded that a competitive distribution system would lower marketing margins to the benefit of farmers and consumers (buyers of farm outputs).

Assessing APRP Impacts on Egypt's Horticultural Exports. This comprehensive presentation, done by Abt Associates' **John Lamb**, covered a lot of ground:

1. A general assessment of the importance of horticulture in Egypt in agricultural production and exports;
2. Assessment methodology and findings from interviews;
3. The pathway to competitiveness in international trade;
4. Benchmarks related to horticulture;
5. Noteworthy results; and,
6. Recommendations for future agricultural policy projects and specific projects to promote the horticultural subsector.

A leading HEIA official noted that the private sector must help itself in promoting the horticultural subsector and that the GOE should put in cold storage (at airports).

The executive director of ESAS noted that APRP accomplished an important benchmark whereby the registration period for new vegetable varieties was reduced from three years to one year. He also noted that in another benchmark the door had been opened for private seed companies to bring in varieties for screening.

Under any follow-on project to APRP, the presenter stressed that policy advocacy would still be important, referring to the five "pieces" of the virtuous circle. Egypt (and USAID) need to pursue a balanced approach.

A consultant to APRP/RDI wondered whether genetically modified seeds should be grown in Egypt to produce horticultural commodities for export, particularly to the EU. The speaker responded that EU resistance to GMOs would eventually be overcome and that the benefits of using genetically modified seed/planting material far outweighed the dangers. USAID has, after all, supported AGERI.

An APRP/RDI analyst wondered if there was any real possibility for incorporating small farmers into future USAID-funded horticultural development schemes. The presenter responded that the Delta presents special problems of contamination of microbiological organisms. He also noted that it was important to raise the productivity of small farmers producing horticultural commodities for domestic markets.

DAY THREE - June 4, 2002

Cross-Cutting Themes

Agricultural Growth, Small and Micro Enterprises and Employment. The SME survey presentation by consultants **Tamer El Meehy and Dr. Lamia Bulbul** offered a lot of empirical information, mainly in the form of graphs and charts, that showed the differences between small and micro enterprises with a place of business (SMEs) and home-based enterprises (HBEs). One discussant pointed out that there was no attempt to disaggregate SMEs and HBEs by type of enterprise, but the data analysis was quite preliminary at the time of the conference presentation.¹

The general point that low demand constrains the growth of SMEs suggests that increases in demand, rather than supply side interventions (such as credit) were key to getting the SME sector booming. This general observation was the strongest link to the Mellor model, which posits that only strong increases in agricultural productivity will increase rural incomes and strengthen demand for rural non-tradables in Egypt.

Another key point was that SMEs typically do not expand by adding workers. Many of these firms have significant under-employment. What tends to happen is that SMEs multiply, spawning copy-cat spinoffs.

Another important point was that SMEs rely heavily on the surrounding environment for inputs, services, and customers. Hence, SMEs are tightly linked to the rural economies where they are found, with rather weak links to metropolitan areas. In a country like Egypt, with a very strong urban (metropolitan) bias, this is a welcome finding. The notion of isolation or self-containment presented here is also strongly related to Mellor's model, which considers "non-tradable" (not exportable) much of what is produced in rural areas (other than agricultural products).

After the presentation on SME survey findings, **Dr. John Mellor** of Abt Associates presented his model on the relationship between agricultural growth, employment and rural incomes.

One discussant noted that agriculture has a lot of redundant labor and argued that technological changes are likely to replace labor with capital and make agriculture more capital-intensive. She also pointed out that the GOE's huge investment in rural electrification contributed significantly to the productivity of SMEs in small towns and villages. Dr. Mellor acknowledged the importance of this and added that this likely contributed to significant investment in small-scale, electricity-powered machinery, which can increase the productivity of SMEs. But what effect do such investments have on employment in SMEs, where under-employment of workers (and reluctance to add workers to existing SMEs) are big problems? Mellor noted that the model shows that labor in the non-tradables sector increased by 2.5 times more than any increase in farm labor as a result of agricultural growth. He also noted that

¹- Subsequent analyses do distinguish between enterprise type. See Gavian, Sarah, Tamer El Meehy and Lamia Bulbul (2002), **The Importance of Agricultural Growth and SME Development to Increases in Rural Employment in Egypt**, Special Study No. 5.

investment in technology in his model was in biological technology, which was not expensive for farmers and did not involve buying any capital equipment.

Another discussant noted that increasing horticultural production, particularly for export, would expand the demand for labor in post-harvest handling. He also pointed out that agricultural growth should not be measured only in physical quantity terms but also in value of output. Hence, not just yields should increase, but unit values of output should as well. While farm output needs to increase, output prices need to increase, too, in order to drive agricultural growth and growth in non-tradables.

A last discussant asked what assumptions about prices were made in the model. Are prices determined endogenously, as they should be? Or were prices assumed to be held constant with expansion in agricultural output? If the latter, the validity of the model might be called into question. In fact, the price of non-tradables is determined endogenously in the model, while the prices of tradables are determined in the world market. Dr. Mellor also responded that the objective function of the model is to maximize returns to the farmer, which would result in higher consumption and income generation in the local village economy.

APRP-Led Changes in the Roles of the Public and Private Sectors in Egyptian Agriculture. **Dr. Derick Brinkerhoff** of Abt Associates made this fine and well-integrated presentation on an important cross-cutting theme of APRP, drawing useful examples from different policy reform areas, commodity subsystems, and implementation activities. One discussant asked how USAID and the GOE could be kept on track for continued reform. How can the successful policy reform mechanism and processes of APRP be sustained? The presenter responded that there should be some endogenous capacity to keep reform going and that an honest broker needed to be in place to keep the reform process moving.

An APRP insider observed that the Government is not only a “supplier of policy.” The demand for policy reform has sometimes come from the Government and not just from the private sector or USAID. APRP has sometimes been an intra-governmental policy broker. Sometimes both the supply and demand for reform have come from the GOE itself.

An MALR representative stated that the problem now is how technical assistance can be maintained and continued after APRP. This is especially important since the project has benefited the private sector. A USAID representative followed up by saying that APRP is part of a long-term strategy of reform in Egypt and not an isolated initiative. APRP can be sustained in the future because it has initiated a policy reform process and achieved good results, which the GOE can build on. Another discussant stated that stakeholders can establish a monitoring body that would act as a broker to continue the reform process as a follow-up to APRP. A last related point was that sustainability is a recurring theme in every USAID project; how to proceed after a successful project such as APRP is critical.

An APRP/RDI team member noted that USAID should pay attention to the management and institutional capacities of trade associations as private sector partners. The capacities of these associations should be built gradually to ensure their ability to use aid money efficiently. Many of them are currently rather weak.

A USAID official noted that after spending a lot of money to reform the cotton subsector, additional policy reform is needed in the area of cotton marketing. Without continued high levels of cash transfers for policy reform, how can the donor community stay the course of cotton market liberalization?

Impact of APRP on the Agricultural Information System. This presentation by consultant **Dr. Rollo Ehrich** and **Dr. Morsy Ali Fawzi** of the MVE Unit covered another topic that cut across much of APRP. It discussed APRP successes, challenges and opportunities in attempting to improve the quality and availability of data on agricultural production (including area cultivated to field crops), marketing, prices and trade. Successes within MALR include the new programs to scientifically collect information on farm income and to forecast crop yields during the season, and the incipient crop area estimation activity. MALR and MWRI also collaborated on the important program to collect and use information on farmers' current planting intentions to match the supply and demand for irrigation water.

One discussant from the RDI Unit said that information is dynamic and should be disseminated in a timely manner and without government intervention. He also noted that information about the New Lands should be given explicit attention and should be made available. APRP has helped establish a section within MALR for the information concerning New Lands.

Another RDI discussant noted that there should be more open channels of communication between various government ministries, particularly MALR and MWRI. For example, MWRI can report any water shortage to the MALR so that they can adjust their planting pattern. This is an important point that is not often mentioned.

An MALR insider noted that the Economic Affairs Sector has succeeded in improving forecasting, so it should be able to obtain and disseminate information fairly easily. However, this is a costly exercise and the returns to better information, although obvious, are hard to verify so as to justify the increased costs.

Impact of APRP on Producers. The presentation on the producer survey results by **Drs. Morsy Ali Fawzi, Mamadou Sidibe and Osman Salama**, the only presentation given largely in Arabic, covered a lot of ground and generated a good deal of discussion. Several discussants seemed to challenge particular findings, though the team emphasized that these were the preliminary empirical results and not the opinions of the team.

One retired MALR official stated that the percentage of owner-operated farms was exaggerated. He suggested that there is a lot of absentee landlordism. He also noted that there is no source other than the GOE for cottonseed, so how could farmers be free to buy it? What was not mentioned is that there may be a small secondary market for seed retained by farmers or traders that is not certified and not approved by the GOE. He also questioned the proportion of farmers using delinted seed, which is limited to specific governorates; maybe producers were responding that they had heard about delinted seed even it was not available in their governorates. This discussant also said that cotton prices are only known by farmers when they are announced in the newspapers, typically well after planting. He suggested that producers' costs are increasing faster than the prices they receive for their outputs.

Another retired MALR official noted that there should be some empirical measures of increases in market efficiency due to liberalization and increased competition in output markets. He mentioned price correlation analysis and analysis of marketing margins as tools for measuring changes in market efficiency over time (although he did not address the data quality issues). He wondered why some farmers did not feel free to choose their cropping pattern nearly 15 years after farmers became free to choose their crops.

An APRP/RDI team member noted that cotton should not be compared with grains in analyses of producers' opinions about the impact of liberalization. Cotton liberalization has been partial; the GOE still distributes the seed and sets seed cotton prices (at PBDAC sales rings). He also noted that differentiating between APCP and APRP reforms was a bit misleading and that it is better to look at policy reform as a continuum. He argued that analyzing gross margins to cultivation of different crops was a good way to analyze whether resources were being allocated efficiently. He also urged that the MALR make information available to farmers through extension agents.

picture 3 here

CONCLUDING POINTS

Some important recurring points, as well as comments during the final afternoon about APRP, were as follows:

1. USAID/Egypt needs to build upon the success of APRP in bringing about policy reform and sustain forward momentum. The unspoken implication of this point was that a long hiatus between APRP and any follow-on program would stall the policy reform process, particularly during a period of financial difficulty facing the GOE. Although conference participants understood that less USAID money would be available to promote GOE policy reform in the future, many felt that some cash, targeted strategically, would be critical in assuring achievement of certain future reforms.
2. In a number of areas, reform progress has been steady but partial (cotton, cooperatives, research and extension, pesticide licensing, registration of dealers, and field supervision). There is serious danger of back-sliding on fertilizer. The wheat subsector, particularly the milling industry, has significant GOE intervention, a set of policies that seem to work at cross-purposes, and an overcapacity problem that has gotten worse since APRP began. The immediate danger in rice appears to be past; there seems to be no real GOE support for a paddy buying system dominated by the cooperatives or forced through PBDAC sales rings, so little is likely to change in 2002/03. Greater paddy supplies, with a larger crop, should lead to lower paddy prices, easing criticism of private traders. Private sector market shares in cotton trading, ginning, spinning, and exporting increased during APRP, but future gains will be difficult to realize without a renewed GOE commitment to liberalization and more active efforts to privatize public trading, ginning and spinning companies.
3. USAID made it clear that any follow-up policy reform program will have far less (tranche) money as a pay-off for accomplishment of particular reforms. USAID hinted that the GOE, with help from advocacy groups, needs to find the resources and wherewithal to keep the policy reform momentum going. USAID will supply resources for continued technical assistance, though the technical assistance (TA) will likely be focused on a smaller number of priority policy areas than APRP, one of which is likely to be cotton. Another might be continued support to advocacy organizations.
4. USAID asked about next steps for cotton policy reform. No clear consensus emerged from the participants; the debate following the cotton subsector presentation was quite heated. MVE notes several items of a neutral cotton policy and action agenda below.
 - Continue to monitor seed cotton marketing in Egypt, particularly the number of market participants, public and private sector market shares, the number of PBDAC rings allocated to private firms (by variety) and the volume of seed cotton bought through these rings, and the number of private rings set up by private firms (and covered by CATGO graders) and the volume of seed cotton bought through these venues.

- Monitor public/private shares in trading, ginning, spinning, exporting, as MVE has done in its annual monitoring reports (with exception of lint exporting, for which data are readily available).
 - Examine why cotton yields have stagnated during the past 15 years. This could be done by bringing in a team of scientists to look at Egypt's cotton breeding program or by arranging a study tour for selected Cotton Research Institute breeders, agronomists and managers to centers of excellence in cotton research in the U.S. and elsewhere.
 - Monitor closely and review the cotton "sector" strategy plan and action program undertaken jointly by the MALR and the Cotton Sector Promotion Programme. This represents an excellent opportunity for the GOE to formulate a coherent strategy and articulate a phased action program, presumably laying out any donor financing and technical assistance requirements for the next few years.
 - Do a needs assessment of the Domestic Cotton Traders' Committee, based in Alexandria and headed by Adel Ezzy, former Chairman of PBDAC and now head of Al-Watany Bank. Determine if this is an advocacy group worthy of USAID support. It has played a minor role in cotton policy for most of its life and especially during the past two marketing seasons, despite representing most of the participants in seed cotton marketing, including public and private trading, ginning and spinning companies.
5. There were several comments about building local capacity to do applied policy research and extension. APRP is not generally perceived as having left much capacity in place, though it provided expertise in policy reform design, implementation, monitoring and evaluation. Such work continues to be heavily dependent upon expatriate-led technical assistance teams. At the height of APRP (mid-1998 through September 2000), there were ten expatriate advisors working in MALR and seven in MWRI.

Despite the acknowledged dependence on expatriate TA, no consensus emerged on how to lessen this dependence and develop sustainable institutional capacity. Different discussants preferred strengthening capacity in different types of institutions: GOE ministries, trade and industry associations, and local universities. Barring any radical departure from past practice, the current technical assistance model, where local consultants are hired from universities, a thin layer of consulting firms, agricultural research institutes, and among a pool of retired civil servants and holding company officials, is likely to prevail.

One way to strengthen the capacity of Egyptian universities would be to award competitive research grants to specific departments, under the leadership of strong individual academics. Rather than merely hiring professors as consultants, USAID and other donors could encourage interested academics to work in teams of professors (senior and junior) and graduate students, developing coherent proposals and workplans for doing a particular contracted piece of research. While this would place more burden on USAID contractors to select grantees, competition would be introduced into academic consulting. A premium would be placed on the quality, feasibility and cost of particular proposals, rather than on seniority or academic prestige.

MVE feels that another way to develop capacity to do market research and improve market information is for advocacy organizations to fund or co-fund such work. The stronger industry and trade associations need to develop their own capacity (and use their own funds) to gather, interpret and publish market information. Their willingness to pay competitive salaries (or consulting fees) to qualified professionals who can perform these services remains uncertain, however.

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